DOCUMENT RESUME

ED 416 109 SO 026 799

AUTHOR	Reinke, Robert W.; Schug, Mark C.; Wentworth, Donald R.
TITLE	Capstone: The Nation's High School Economics Course. Student Activities.
INSTITUTION	Joint Council on Economic Education, New York, NY.
ISBN	ISBN-1-56183-405-X
PUB DATE	1991-00-00
NOTE	186p.; For related "Teacher Resource Manual," see SO 026 798. A third volume, entitled "Teacher Specimen Set," combines the exact texts of SO 026 798 and SO 026 799.
AVAILABLE FROM	Joint Council on Economic Education, 432 Park Avenue South, New York, NY 10016.
PUB TYPE	Guides - Classroom - Learner (051)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	Consumer Economics; *Economic Change; Economic Climate; *Economic Factors; *Economics; *Economics Education; Futures (Of Society); Global Education; Grade 11; Grade 12; High Schools; Instructional Materials; Macroeconomics; Microeconomics; Social Studies

ABSTRACT

This student activities book is intended for a model one-semester course for high school economics for eleventh- and twelfth-grade students. The seven units in the book are linked to content ordinarily found in microeconomic and macroeconomic courses. Each unit contains 5 to 11 lessons, an author's note to the students and classroom instructional materials. Each lesson contains a summary of economic content, an economic reasoning summary and student materials. The seven units in the activities book are: (1) "Why Economics Is Important"; (2) "Supply and Demand"; (3) "Consumers and Producers"; (4) "The Role of Government in Economics"; (5) "Macroeconomics"; (6) "Macroeconomics: Forecasting Our Economic Future"; and (7) "International Economics Issues." All relevant handouts are included in the unit. (EH)

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STUDENT ACTIVITIES

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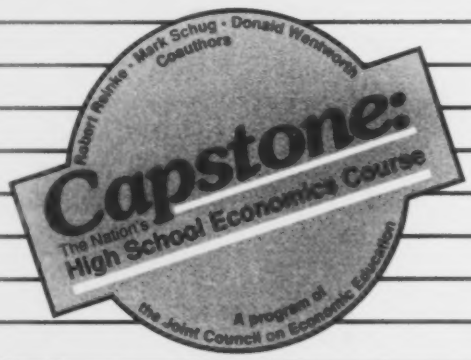

Joint Council on Economic Education
432 Park Avenue South
New York, NY 10016

ISBN 1-56183-405-X

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Capstone:
The Nation's High School Economics Course

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A program of the Joint Council on Economic Education

Student Activities

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UNIT 1
WHY ECONOMICS IS IMPORTANT

Student Handouts

Handout 1-1-1
Economic Reasoning Quiz

1. The best things in life are free.
   A. True
   B. False

2. The largest cost of going to college is tuition, room, and board.
   A. True
   B. False

3. The purpose of economic activity is to improve the well-being of some people at the expense of others.
   A. True
   B. False

4. Anything worth doing is worth doing well.
   A. True
   B. False

5. Life is priceless.
   A. True
   B. False

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Handout 1-1-2
Letter to *Capstone* Students

Learning About the Economy and Solving its Mysteries

Dear *Capstone* Student:

Welcome to the study of economics! You may find this investigation interesting, complicated, demanding, or even overwhelming. Don't be surprised. You will do fine if you read your book, attend class, participate in the lessons, study occasionally (each evening!), and remember a few important clues (principles) which guide all economic analysis. Everything you study in this course should relate to these principles in some manner. Use them and you will be looking in the right direction. The *Capstone* course will help you to learn about human economic behavior by basing its analysis on these same principles.

Economics will help you understand not only the U.S. economy but also economic events taking place elsewhere in the world. We will learn why citizens of Angola use six-packs of imported beer as money, how farmers in the USSR produce most of that nation's food on 10 percent of the country's agricultural land, and why Taiwanese citizens make raincoats for Americans. As an example, let us concentrate on some economic activities in Cuba.

Economic principles help us to understand human behavior.

Had you visited Cuba during the 1980s you might well have been baffled by the restaurant scene in some cities. Cuban citizens often waited in long lines outside restaurants, and, when the establishments opened, the customers were quickly escorted to tables where they ordered large quantities of food. When the food was served, the customers scooped it into plastic bags, tucked it under coats or into satchels, paid for their "meals," and hurried home.

Why didn't the customers eat their food at the restaurants as Americans do?

Well, you might say, people come in different shapes and sizes, with different religious beliefs, family backgrounds, cultural customs, and personal tastes. How can we understand the behavior of people who live in a different part of the world, speak a different language, and live under a different economic system? Maybe they behave this way because it is a unique Cuban cultural tradition.

Good try, but economists think we can do a better job of understanding human behavior than just to say people are different. Several important economic clues can help us to solve such a mystery. These clues consist of behaviors common to all human beings no matter what their age, religion, political system, gender, or cultural heritage. Let's take a look at these economic principles (clues) and see if we can use them to solve this Cuban mystery.

Principle 1
People Economize

People face *choices* every moment of the day. What should they wear? Should they study or go out? Should they get a job or stay in school? No matter how old or young, rich or poor, or where people live, they must make choices, and the choices they make set the pattern of their lives and the lives of people associated with them. Economists argue that all economic actions — individual, corporate, or governmental — are the result of choices made by individuals. If we understand why and how the choices are made, we can understand and anticipate economic actions.

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People *economize* when they choose what seems to be the best alternative for them.

Of course, not everyone will make the same choices, because people value things differently. In other words, personal choices vary, but everyone must make choices. What people have in common is purposeful, choice-making behavior. In economics this behavior is called *economizing*: that is, people choose the alternative which seems best to them because it involves the least cost and greatest benefit compared to any other alternative. Why do rock music fans turn up the volume so high? Because they enjoy the music best at that level; they think that loud music is the best alternative available to them. Will they change their minds? If Dad says that he will personally throw the stereo into the trash can if the music isn't turned down, rock music fans tend to choose the low volume alternative. The cost of loud music has then changed a great deal, and the benefit has not changed as much, so the lower-cost, lower-enjoyment decision to turn down the music is an example of economizing. Music listeners choose the best level of volume available to them, given the relative cost and benefit of each alternative. The volume is not chosen by accident or lack of intelligence.

Why do some Cuban citizens buy food in restaurants for home use? Economic analysis assumes they think it is the best alternative available to them. It is not an accident or purely a cultural phenomenon.

Principle 2

All Choices Involve Cost

This important principle tells us that everyone gives up something when he or she makes a choice. Choosing actually involves two actions. When more than one alternative is available, we choose and refuse at the same time. The old saying, "I had no choice," just doesn't hold in economic analysis — there always are alternatives, for there are substitutes for everything! But sometimes the cost of an alternative is so high or so low that we may think there is only one alternative available. An example would be a choice between eating worm-eaten apples or chocolate cake for dessert. The cost of giving up worm-eaten apples to get chocolate cake is so low that it seems there is only one alternative, i.e., chocolate cake.

The cost of any choice is the best alternative not chosen.

Costs may also be so high that there appears to be no choice. Most adults could purchase a $60,000 car, but ask them and they are apt to say that they couldn't afford to. Actually they could get a loan to purchase the car and make the necessary payments. The problem comes with what they would have to give up — they might have to eat less, find a cheaper place to live, and buy no new clothing. If the car were more important than these other things, they would buy the car. At this point the benefits of a $60,000 car do not outweigh the costs, so it appears to be a poor economizing choice for most people.

Returning then to the Cuban example, we can use this same analysis. Cuban citizens spend valuable time and income to buy food in restaurants to eat at home. The benefits must be greater than the costs or they would stop purchasing food in this manner. Cuban citizens, like other people, make purposeful choices that seem best to them.

Principle 3

People Respond to Incentives in Predictable Ways

Changes in *incentives* influence economic choices.

Incentives are any actions, awards, or rewards that encourage people to act. A change in incentives usually involves an increase in benefits or a reduction in the costs of actions. When incentives change, the choices people make also change, and in predictable ways. What incentives influence your choices? How hard do you work on a test if you get credit for all your right answers? Would you study as hard if everyone received the same grade no matter how well each

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scored on the test? Would you run in a 10 kilometer race? Would a $5,000 award to everyone who finishes the race change your mind? Would you drive a car to school if you had your own automobile? Would you change your mind if 25 percent of the cars parked in the school lot were damaged by vandals every day?

Since changes in incentives influence economic choices, we can make reasonable predictions if we know the existing incentives in an economy and how they might change. When incentives change, people change the choices they make about work, about buying products, and so on. It is a safe bet that Cuban citizens are responding to incentives in their decisions to purchase food.

Principle 4

Economic Systems Influence Individual Choices and Incentives

Individual choices are influenced by the rules and customs of the economy of a country. People in all countries have means of working together to provide themselves with food, clothing, shelter, transportation, entertainment, and other important goods and services. How people work together is governed by written and unwritten rules of cooperation, and these rules influence personal incentives. Laws and contracts are examples of written rules in the U.S. economy, while treating customers courteously ("the customer is always right") is an unwritten rule or custom. As rules change, incentives and choices change. For instance, in 1950, very few people worked as tax consultants and most Americans made out their own tax forms. Since 1950, U.S. tax laws (written rules) have become very complicated. As a result, many Americans now hire tax consultants to help them figure out their taxes correctly. As the rules changed, behavior changed.

Rules help set the economic environment that influences individual choices.

Rules provide a key to the Cuban restaurant puzzle. In Cuba, food was rationed, and if citizens went to Cuban grocery stores they could only buy the amount permitted by their rations. If people wanted to buy more food, they could not do it in a grocery store. That was against the rules. In any case, the stores may not have had the extra food to sell. But restaurants could sell any amount and type of food they wished to customers. The food rationing rules did not apply to restaurants; therefore people went to restaurants to obtain extra food to eat at home.

Principle 5

Voluntary Trade Creates Wealth

People throughout the world voluntarily trade with other people to gain goods and services they want. Trade has existed throughout human history. Why? Because people can improve their situation by trading something of which they have a relative surplus (and therefore they value it less) for something of which they have a relative scarcity (and therefore value it more).

People trade with one another when they anticipate that they will gain something through the trade.

The Japanese trade color television sets and cameras with Americans for American wheat and lumber. Workers trade work time for income from employers. In each situation, people make purposeful decisions and give up something of value to gain something of greater value to them. In this process they become better off than they were before they traded. The gains people acquire through trade may include more than money; they may include everything that makes a person think he or she is "better off" —e.g., increased leisure time, availability of a wider variety of goods and services, health, etc. When studying economic behavior, note whether individuals are encouraged or discouraged from trading by the rules governing their economy.

In Cuba, customers and restaurant owners both gain when they serve and purchase food. They are wealthier after the trade than they were prior to the trade. The customers have more food; the restaurant owners have more money.

When we make economic choices, we forecast the future.

Principle 6

The Consequences of Choices Lie in the Future

We are all economic forecasters! All of us try to do the right thing to make our economic futures as bright as possible. This is as true for Cubans (and everyone else) as it is for U.S. citizens. Realistically, the only options available to individuals are those which will influence their futures. We cannot control or influence events and choices of the past. The only important costs and benefits in economic decision-making are those which will appear in the future. Economics therefore can be described as the study of the choices people make as they forecast the future.

Now let's return to the Cuban restaurant example. The Cuban government issues food rationing coupons (a rule), thereby limiting purchases in retail food stores by citizens, as an attempt to insure that everyone will get some food. Cubans who have extra income and want more food than they are entitled to through their food -rationing coupons turn to restaurants for alternative opportunities to get more food. They purchase food at restaurants and serve it at the family dinner table. This makes sense to the customers. It is the best choice available to them under the circumstances posed by the economic system in which they live. Under these circumstances, there is a strong incentive to use the restaurant as a grocery store!

Economic reasoning using these six principles will help you to anticipate and more accurately forecast the decisions people will make in the future. As anticipated costs and benefits change, individuals begin to alter their behavior in predictable ways to maximize their potential benefits and minimize what they give up in order to obtain those benefits.

Are you beginning to see how economic analysis can help make sense out of puzzling behavior? The *Capstone* course will help you to solve many economic mysteries by looking at the choices people make and at what influences those choices. Use the six economic principles we have discussed in this letter as clues to help you study economics.

Sincerely,

The *Capstone* authors

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Handout 1-1-3
Handy Dandy Guide (HDG)

1. People economize.
   - What is the choice being made?
   - Who is making the choice?

2. All choices involve cost.
   - What were the alternatives?
   - What is being refused?

3. People respond to incentives in predictable ways.
   - What are the potential benefits?
   - What are the potential costs?
   - Have they changed?

4. Economic systems influence individual choices and incentives.
   - Have the choices made by others influenced the individuals in the situation?
   - What are the rules of the system?
   - How might the rules have changed?

5. Voluntary trade creates wealth.
   - Why is exchange taking place or not taking place?
   - How do these choices influence trade and exchange?

6. The consequences of choices lie in the future.
   - What costs and benefits do you foresee?
   - How uncertain or risky is the choice being made?

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Handout 1-2-1
You and the Economy: A Survey

Introduction

People spend money. People earn money. People save money. People contribute money and time to help others in their community. There is nothing very surprising about this.

Or is there? Are young people "players" in the economy? If they are, why do they participate?

The purpose of the following questions is to gather information about how you and others in the class are important in the local economy. Complete the questions below. The information you provide will then be used as a basis for class discussion. An example is often provided to help you get started.

Part 1 You Are a Consumer

1. What are the names of some of the businesses where you spend your money? (Include grocery stores, restaurants, department stores, service stations, record shops.)

   McDonalds _____ _____

   _____ _____

   _____ _____

   _____ _____

2. What are the names of businesses in your community that specialize in serving people your age?

   Musicland _____ _____

   _____ _____

   _____ _____

   _____ _____

3. Name two products that you or your family have recently purchased that were made in another country.

   _____

   _____

4. Name products or services that your family purchased because of you. For example, your family might have bought a favorite food, a new appliance, or a new family car because of your influence.

   _____

   _____

5. Do you do some of the shopping for your family? List some of the products you buy.

   _____

   _____

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Part 2 You Are a Producer

1. What kind of work do you do at home or for friends or neighbors to earn money?

   babysitting

2. If you have a part-time job, tell what you do and where you work.

Where you work	*Type of job*
Reading Glasses Bookstore	clerk

Part 3 You Are a Saver

1. Are you saving money for anything? If yes, for what?

2. Do you have a savings account of any kind? If yes, what kind is it?

Part 4 You Are a Contributor

1. Have you recently donated money or work to a charitable cause? This might include buying an overpriced candy bar from the kids in the German Club, contributing food to a food drive, or walking in a marathon to raise money to fight cancer.

Handout 1-3-1
Choices and Alternatives

A world of scarcity forces people to choose among competing alternatives. Naturally, people try to pick the alternative which provides the greatest benefit at the lowest cost. Sometimes alternatives have such high costs that we don't even consider them as alternatives!

Alternatives

An alternative is one of many different actions that we might take in a given situation. If we have $10 to spend, for example, one alternative might be to buy a record album. Another alternative might be to buy a pizza. If we are hiking and meet a mad grizzly bear on the path ahead, one alternative might be to make ugly faces at it in the hope that it will run away. Another alternative might be to get out of the area as quickly as possible.

Choices

A choice is the course of action we take when faced with a set of alternatives. Some people will choose to buy the record album, others the pizza, still others might choose a different alternative altogether. In the hiking example, not many people would be likely to choose the face-making alternative because of its likelihood of failure.

Directions: Read each of the cases below. Identify the alternatives and the anticipated costs and benefits for each situation. Indicate which alternative you would choose by putting a check (√) next to it. Choice Grid #1 is completed for you as an example.

1. Mary Ellis: Mary wanted desperately to go to the dance Saturday in the gym, but no one asked her. She said she had no choice but to stay home with her family and watch TV. Did she have a choice?

Choice Grid #1

ALTERNATIVE	COST	BENEFIT
Stay home and watch TV	Miss the dance	Watch TV with the family
Ask someone out herself	Fear of rejection, possible humiliation	Get to go to dance with someone she likes
Have a friend make a date with someone	Date may be a disaster	Get to go to the dance

2. Samantha Marsh has operated Sam's Spicy Subs, a sandwich stand near Jefferson High School, for five years. Every day, she sells her special submarines to her loyal high school customers who flock to the stand during their lunch period. Recently, Sam raised her prices by $.50 per sub. Several customers protested the price increase. They said that subs now cost more than buying lunch at the burger place up the street or – worse yet – more than the lunch they could buy at school. Sam explained to her displeased customers that the fee for the license she needs from the city health department had increased a lot. She had no choice but to increase the price she charged for her subs. Did she have a choice?

Choice Grid #2

ALTERNATIVE	COST	BENEFIT

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3. Mr. Wurker: Mr. Otto Wurker owns a factory which supplies bumpers to a major car manufacturer. From his once prominent position in the community, Otto has fallen on tough times. Imports from Europe and Asia have cut into the sales of U.S. cars, and many of his friends and employees have been laid off. Looking over the almost empty factory, he says to the visiting U.S. senators who are touring this economically depressed area, "We have no choice — we must restrict imports of foreign cars and trucks."

Choice Grid #3

ALTERNATIVE	COST	BENEFIT

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Handout 1-4-1
Cassandra Goes to College

What is the problem?

Cassandra is a senior in high school. She has decided to go to college after she graduates from Kennedy High School. She is currently thinking about majoring in English literature, but that could change. She is the oldest of three children and is the first in the family to go to college. It is a big decision for her and her family. Money, at least for the first year or two, is not a big problem. She has some money saved from the Social Security payments she has received for the last six years since the death of her father. The main problem is that she doesn't know which college is best for her.

What are the alternatives?

Cassandra and her mother agree on three. They visited each campus.

Metropolitan University
MU is a state university near Cassandra's home. It has a solid reputation for good teaching — especially in the English Department. Some of Cassandra's friends plan to go to MU, but her closest two friends will go elsewhere. The school's tuition is modest. Cassandra could live at home, so the out-of-pocket cost of going to school would be low.

Big Main State University
BMSU is a large state university. It ranks overall as one of the top colleges in the country and is best known for its programs in law and medicine. As a state-supported school, its tuition fees are modest; however, the cost of renting a dorm room and meals would be an added expense as well as the cost of travel to and from home. Cassandra's two best friends, Missy and Mariah, plan to go to BMSU.

Essex University
EU is a small liberal arts school with a good reputation. Its English literature department is known to be first-rate. Essex is located in a nearby state; the cost of tuition is very high. None of Cassandra's friends plan to attend EU.

What are Cassandra's criteria?

Cassandra has given it a lot of thought. She has come up with four criteria that she thinks are most important to her. First, she knows that because her funds are limited, tuition costs are an important factor. Second, while she would not mind living at home, Cassandra thinks she would prefer to be more independent. Third, Cassandra likes her friends and would like to attend the same school that they choose. Finally, Cassandra would like to be sure that the professors really know their subjects and care about their students.

Use the Decision Grid and Cassandra's criteria to help decide what you think Cassandra should do.

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Handout 1-4-2
Decision Making Grid

1. What is the problem?
2. What are the alternatives?
3. What are the criteria?
4. Rank the criteria.
5. Evaluate the alternatives.
6. Make a decision.

	Criteria					
Rank of Criteria						
Alternative 1						
Alternative 2						
Alternative 3						
Alternative 4						

Decision: _____

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Handout 1-4-3
Should Willy Work Part-time?

What is the problem?

Willy is a junior at King High School. This year he is really strapped for money. He is thinking that he may need to find a part-time job like many of his friends. The job would help him earn some spending money. He is tired of depending on the small allowance his father gives him and of loans from his friends. (Willy's father and friends are a little tired of it, too.) The situation is complicated because Willy's work at school hasn't been going well. Willy is worried that if he works more than 20 hours a week, his grades might go down and he could risk not graduating on time. Failing to receive his high school diploma could cause serious long-term problems of getting into schools beyond high school or getting a decent job.

What are the alternatives?

Willy figures that he has three choices. First, he could take the job offered him at Frank's Fast Franks. He would work 15-20 hours each week and receive $3.50 per hour. Or, he could work at Howard's Hefty Hardware. Howard wants him to work 25 hours a week and also will pay $3.50. Or Willy could choose to make no change in his current situation.

What are Willy's criteria?

Willy is interested in making more money and becoming less dependent on his family and friends. But he doesn't want to let his grades slip.

Fill out a Decision Grid to help Willy decide.

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Handout 1-5-1
Going to School Year-Round?

What is the problem?

The high school in Lakewood is overcrowded. Enrollments are rapidly increasing. Students and teachers are complaining about classes of 35-40 students. Moreover, it appears that student achievement is going down.

Marleen Orlowski, a school board member, has proposed hiring more teachers and building a new high school. She argues that these steps are the only realistic way to bring down class sizes and improve instruction. Other board members and some people in the community are complaining that this is a very expensive way to solve the problem.

Linda Burns, another school board member, has proposed that the Lakewood High School should follow the example of over 400 other U.S. schools and begin a year-round school calendar. The school year would be organized into three trimesters, each followed by one month of vacation.

On the one hand, some schools which have experimented with a twelve-month schedule have found that student test scores improve and that the drop-out rate is reduced. These positive effects may be the results of reduced class sizes and the elimination of long summer breaks when many students' skills slide from neglect. On the other hand, some parents do not like the year-round school. It is inconvenient for arranging vacations. Similarly, some students are unhappy because they like the long summers off. They say that they want to work at summer jobs and enjoy the freedom of a long break away from school.

What are the alternatives?

The Lakewood School Board is holding a community hearing to consider what to do. Here are the choices it is considering.

Year-Round School

The advantage of this alternative is that it may increase student learning at very little additional cost. Class sizes could be reduced. Student performance on tests is likely to improve. However, some parents will be inconvenienced. Some students also will object. While the year-round school provides three months of vacation, some students do not like to give up the freedom of extended work and play during the summer.

Add Teachers and Build a New School

The advantage of this option is that students and parents could keep their summers free. Class-sizes would be reduced, so there would probably be some improvement in learning. The main problem with this option is its expense. Taxpayers in Lakewood think that taxes are already too high. Some families and businesses have threatened to leave town if taxes are increased again.

Make No Change

No change in the school program will mean that class sizes remain large and student performance might continue to decline. However, the cost of operating the schools would not increase.

Use the Decision Grid to help you decide what you think the school board should do.

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Handout 1-5-2
Decision Making Grid

1. What is the problem?
2. What are the alternatives?
3. What are the criteria?
4. Rank the criteria.
5. Evaluate the alternatives.
6. Make a decision.

	Criteria					
Rank of Criteria						
Alternative 1						
Alternative 2						
Alternative 3						
Alternative 4						

Decision: _____

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Handout 1-5-3
The Sound of Money

What is the problem?

Have you heard of digital audio tapes (DAT)? For music fans in Japan and Europe, it is a great new product. For the U.S. record industry, it is causing a great new problem.

There are two main advantages that make the DATs attractive. First, they make a tape player sound as crisp and clean as a compact disc (CD) player. There is no background hiss common on regular tapes, and popping noises caused by dust are eliminated. Second, DATs allow consumers to make near perfect copies of CDs. Home taping may never be the same. And that's where the problem is. The U.S. record industry figures it loses about $1.5 billion per year due to home taping. The arrival of the DAT will make home taping even more popular, and sales of new CDs are likely to be hurt. In fact, if the problem becomes severe, new musicians and record companies may be discouraged from producing new recordings at all; this would hurt the record industry and consumers.

The U.S. Congress must decide whether new legislation is required to protect the record industry. The following are the main alternatives under consideration.

What are the alternatives?

Prevent the import of DATs into the U.S.

This would provide protection for the American record industry. New musicians would not be discouraged from producing their best. American consumers would be denied use of a new technology. Over the long term, it may be very hard to prevent DATs from entering the market illegally. Illegal markets usually result in very high prices to consumers.

Require record companies selling in the United States to use an anti-taping technology with the CDs which would make them copy poorly.

This step would protect the American record industry by rendering CDs uncopyable. New musicians would not be discouraged. The use of the new technology would make the cost of a CD somewhat more expensive. The freedom of consumers to have access to new technology would be reduced. However, consumers could still have the opportunity to use DATs if they wished.

Allow the import of DATs.

This option would provide consumers with maximum choices. The record industry might be hurt. However, the industry has been healthy. Recent record sales have been booming. In the long term, some musicians might decide that they cannot make a living in an industry where consumers think that they are entitled to a second item for free just because they bought the first one.

Use the Decision Making Grid to help you decide what you think Congress should do.

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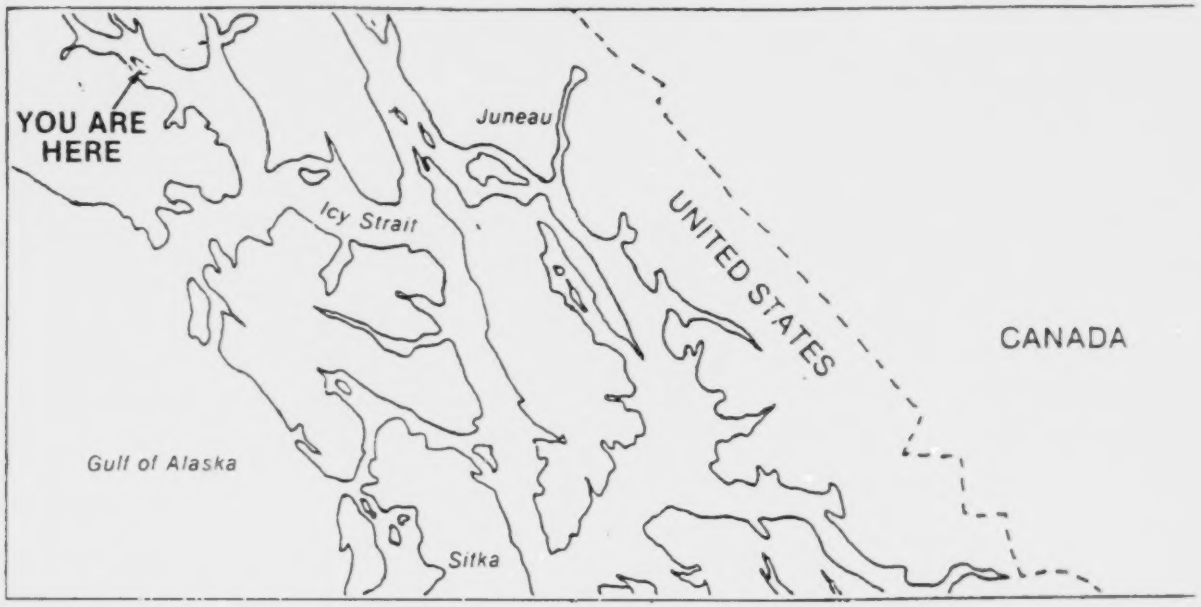
Handout 1-6-1
Survival



Environment

LAND
- sandy & rocky beach
- rough cliffs
- mountainous interior
- thick forest with Douglas fir and Sitka spruce trees

CLIMATE:
- mild summers
- frequent rain showers
- morning & evening fog
- changeable weather

WILDLIFE
- deer & rabbits
- seagulls & eagles
- fish & clams

Salvaged Equipment

1 compass (no radio)

2 rain ponchos

1 book of matches

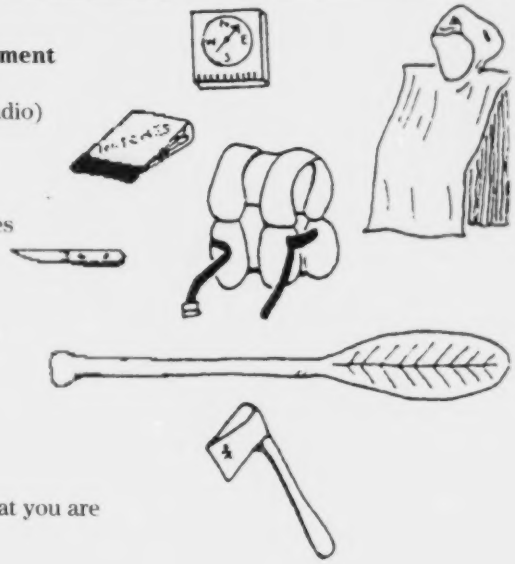
2 knives

3 life preservers

2 paddles

1 small axe

wet clothing (what you are wearing)



Write your survival plan below. As you develop your survival plan, consider the following questions.

1. What will you produce?
2. How will you make it?
3. How will you share it?

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Handout 1-7-1
D.C. or Bust

This year the students in Mrs. Kean's government class decided that they didn't want merely to study government — they did that in U.S. history last year. This semester they want to visit Washington, D.C. to see first-hand how things are done.

Mrs. Kean thought this was a great idea. She would be happy to help plan much of the activity, including arranging visits with the state's members of Congress, going to committee hearings, setting up a tour of the White House, and doing some sightseeing — perhaps seeing a play at the Ford Theatre.

The main problem was money. After all, it's not cheap to take 30 teenagers to Washington, D.C. for a week. Air tickets, hotel accommodations, food, traveling on the Metro . . . there were lots of things to think about.

The class decided that, if they were to go, they would need to do several things to raise money. One suggestion was to run car washes every Saturday.

Sara ("Scrub-a-Dub") Davis was named to begin work on the car wash. Sara had her volunteer committee members meet after school to begin work. One of their first problems was to decide what they would need in order to run a car wash.

Make a list below of everything you can think of that you would need to run a car wash.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

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Handout 1-7-2
Productive Resources and Your Imagination

Like beauty, productive resources are in the eye of the beholder. One person's piece of junk is another person's treasure. Read each of the cases below to learn how resources can be transformed into new productive uses.

The pioneers who settled in the prairies and plains of the American West quickly discovered that the plains offered few resources for building inexpensive shelter. Trees were scarce. But prairie grass was abundant and was soon put to use as a productive resource. The pioneers cut sod into bricks and used it to build homes and other buildings. It became a popular building material.

Clarence and Edward Irvin Scott were the founders of Scott Paper company. One day in 1907, they received an order of paper that was too heavy for use as bathroom tissue. No one knew what to do with the defective shipment except to return it or haul it away as garbage. Arthur Scott, one of the Scott brothers, suggested perforating it and marketing the paper as paper towels. It was the first paper towel manufactured in the United States. A potential waste product from faulty manufacturing was converted into a valuable new productive resource.

In 1907, James Murray Spangler was a janitor who had a respiratory condition which made it difficult to run the carpet cleaner he used in his job. He used his inventive mind to reassemble a set of existing resources. He fastened a small set of wheels to a discarded soapbox. He added a roller brush and a motor from a small fan to rotate the brush and attached a pillowcase as a bag to catch dirt and dust. He patented his "electric suction sweeper" in 1908. He sold one of his new machines to his cousin, Sarah Hoover, the wife of William H. Hoover. Hoover eventually bought the right to manufacture the machine and invented the home demonstration as the way to sell the product to households all over the nation.

The examples above are cases where existing resources were converted into new productive resources to provide a good that consumers wanted. Work with the people in your group to identify a good or service that you think people would like to have. Don't worry about money or time problems. The good or service might be something big, like a submarine to harvest ocean delicacies from the sea bottom, or something small, like running a tutoring service for students who need help with a required computer science course. Just come up with a product or service that you think people would like.

List the resources you think you would need to produce your good or service. List them under the following categories:

Natural Resources | Labor Resources | Capital Resources

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Handout 1-8-1
QUIZ

DO NOT write on this quiz sheet. Mark all answers on the *ANSWER SHEET* only!

1. Making a *choice* means:

   A. deciding between many possibilities.
   B. not thinking of future circumstances.
   C. being able to get everything.
   D. considering your daily horoscope.

2. People throughout the world usually make choices:

   A. impulsively — choosing quickly without much thought.
   B. generously — thinking of the needs of others.
   C. randomly — leaving the outcome up to chance.
   D. purposefully — considering costs and benefits.

3. An *incentive* is:

   A. a fictitious animal that exists only in fables and fairy tales.
   B. a sacrifice above and beyond the call of duty.
   C. a reward you want to receive.
   D. a fancy dessert that you can order at elegant restaurants.

4. How are incentives related to choices?

   A. Incentives motivate people to make certain types of choices.
   B. Incentives rarely influence personal choices.
   C. Incentives make it difficult to predict what choices people will make.
   D. Incentives have nothing to do with choice making.

5. High school football players choose to turn out for practice on a daily basis, endure tough physical workouts, and get sore muscles and bruised bodies. The personal incentive for choosing to do this most likely would be:

   A. money, profit, and financial well-being.
   B. acclaim, stature, and prestige.
   C. safety, insurance, and security.
   D. toil, pain, and hardship.

6. A *rule* is:

   A. a greeting, a beginning, or an introduction.
   B. a country, a state, or a nation.
   C. a law, a guideline, or a regulation.
   D. a shape, a size, or a volume.

7. How are rules related to incentives?

   A. Rules are designed to eliminate incentives.
   B. Rules influence personal incentives.
   C. Rules are made to enforce incentives.
   D. Rules have nothing to do with incentives.

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8. Joe is a salesperson for a company that makes pocket calculators. Company rules allow Joe to obtain calculators each month, and he is paid $10 for every calculator he orders from the company. He can keep the money even if he doesn't sell all the calculators. Joe's incentive is profit. He wants to make as much money as possible. Joe probably will choose to:

   A. obtain *fewer* calculators than he thinks he can actually sell.
   B. obtain *exactly as many* calculators as he thinks he can actually sell.
   C. obtain *more* calculators than he thinks he can actually sell.
   D. find a different way to make a living.

9. Recently, Joe's company changed its rules. The company allows Joe to obtain a certain number of calculators each month and keep $10 for every calculator he sells. Also, new rules state that Joe must pay the company for every calculator he has obtained but has not sold by the end of the month. Joe's incentive is profit. He still wants to make as much money as possible. Joe most likely will choose to:

   A. obtain *fewer* calculators than he thinks he can actually sell.
   B. obtain *exactly as many* calculators as he thinks he can actually sell.
   C. obtain *more* calculators than he thinks he can actually sell.
   D. retire.

10. People usually trade with each other when:
   A. they don't know what to expect from making a trade.
   B. they think they will be worse off after making a trade.
   C. they predict that the costs of trading will be greater than the benefits.
   D. they feel they will be better off from making a trade.

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Handout 1-8-2
First Answer Sheet

Name _____

Score = Total Number Correct _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

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Handout 1-8-3
Second Answer Sheet

Name _____

Score = Total Number Correct _____

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

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Handout 1-8-4
Classifying Types of Economic Activity

Directions: Below is a list of examples of economic activity. Discuss the examples with the other people in your group. Then decide, for each example, whether it represents a market, tradition, or command economic system. Write the number of the example in the correct column. Have reasons ready to support your decisions. Before you return to the whole group, be sure to add two or three examples of your own for each category.

1. Ralph becomes a police officer because his father was one — it runs in the family.
2. Alice thinks that her community needs another discount computer store, so she decides to start her own business.
3. Norton is retired now, so he collects Social Security.
4. Trixie refused to buy a pair of jeans because they cost too much.
5. Every September George buys a new Chevrolet because every year he buys a new Chevrolet.
6. Gracie and her family live in housing which the federal government provides at a reduced rent.
7. To increase his income, Huang Peilin raises chickens, ducks and geese which he and his family sell at a local free market in northern China.
8. The Soviet State Planning Commission (Gosplan) decides how many tons of coal should be produced.
9. Stock market prices decline in Tokyo because of large offerings of steel stocks for sale.
10. In Mexico City, business slacks off for lunch at 2:30 p.m. and gets started again around 5:00 p.m.
11. Soviet doctors may treat patients at home for a fee.
12. Soviet doctors are employees of the state; any fee they charge for home treatment is regulated by the state.

Types of Economic Activity

Market	Traditional	Command

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Handout 1-9-1
Earning a Living

Overview

Individuals function both as **consumers** and **producers**. In the U.S. economy, consumers use dollars to buy the goods and services that business firms produce. The markets in which these exchanges take place are known as **product markets**. The local grocery store is one example of a product market. Can you think of others?

Individuals also function as producers by supplying productive resources to businesses, which use these resources to produce goods and services. The markets in which these exchanges take place are known as **factor markets** (or resource markets). Examples of factor markets are the hiring of workers by a business firm, as well as the savings individuals place in a bank or in bonds, common stocks, etc., that are loaned to or invested in a business firm. Payment for savings (including bonds) loaned to others is called interest; earnings paid to the owners of common stocks are called dividends.

There are three categories of productive resources used to produce goods and services. They are human resources, natural resources, and capital goods.

Human resources are the people that are available for work and the ability, quality, and motivation of these individuals. The quality of human resources reflects the health of people and their past efforts to improve their skills, knowledge, and motivation through education and training. Businesses pay wages and salaries to households —actually, to the individuals in those households who hold jobs — for the use of labor resources. Approximately 75 percent of all income earned in the U.S. economy represents labor income.

The ability of some people to organize economic activity by taking the risks associated with starting a business or introducing a good or service into the marketplace in the hope of earning a profit is given a special name, entrepreneurship. In our economy the owners of business firms are the entrepreneurs. If a business firm is successful in selling its product for more than it costs to produce it, then the business earns a profit. If it is unsuccessful, it will incur a loss. Profits represent the return to business for risk-taking, motivation, efficiency, or some type of monopoly power —perhaps for all of the foregoing.

In order to earn profits, businesses must sell products that households want to buy. If a business firm doesn't produce what households want to buy or if it doesn't keep its production costs down enough to compete with other producers, it will incur losses. A firm will eventually go bankrupt if its losses continue long enough.

Natural resources are the gifts of nature. They include land, timber, water, fish, oil and mineral deposits, the fertility of the soil, and climatic conditions. Some natural resources, such as timber, are renewable, and others, such as oil, are not.

Capital goods are the manufactured or constructed means with which production is carried on. They include buildings, machinery, and equipment used by business in the production process. When such items are not owned by the business that uses them, the users pay the owner a fee for the right to such use. (Incidentally, in everyday speech people commonly refer to money as capital, but in economics the terms "capital" or "capital goods" refer to the buildings, machines, etc. that produce goods or services.)

Instructions for the Earning a Living Game

In this game you will play the role of a household or a business. Read carefully about the function of each in the game. Your teacher will assign you your role.

Households: Your function is to sell to business the human resources, natural resources, and capital goods it must have to produce a product.[1] You should use the income you earn from selling these resources to buy from business the goods and services your household requires. These goods and services are called ECONOS in this game. You can satisfy all your household needs and desires by purchasing ECONOS, which are the products produced by business in the *Earning a Living* game. Your success as a household will be measured according to how many ECONOS you are able to accumulate during the game. You have been given 15 Resources cards. In order to buy ECONOS, you must sell your resources to businesses and then use the income you make to acquire ECONOS. Do not hoard your resources because only the value of ECONOS will count at the end of the game.

Business Firms: Your function is to supply to households the goods and services they desire, and to earn a profit in the process. In this game the only products households want to buy are ECONOS. In order to make one ECONO, you must act as an entrepreneur and acquire one unit of human resources, one unit of natural resources, and one unit of capital goods. Your firm must buy these resources from households at the best price you can negotiate. Once you have accumulated one unit of each, you may turn

[1] Corporations are also owners of natural resources and capital goods, but the owners of a corporation —that is, its stockholders — are families and individuals or their representatives.

them in at the class factory, which will produce one ECONO for you. You are then free to sell the ECONO to any household for the best price you can negotiate. In order to earn a profit, you must sell the ECONO for more than your costs of production, which in this game include the wages and salaries paid labor and the rent and interest paid for the use of natural resources and capital goods. You can then use the money you receive from the sale to acquire additional resources in order to produce more ECONOS. You will receive $1,000 to start the game. Your business success will be measured according to how many dollars of profit you are able to earn during the game. Plan to have all your products sold by the end of the game. If you run out of money completely and have no ECONOS to sell, you must shout "bankrupt," return to your seat, and quit the game.

A Word about Pricing: Only $100 bills are used in this game. It is possible to arrive at prices other than $100, $200, $300, etc., for resources and ECONOS by combining several items in a single transaction. For instance, two Resources cards could be sold for $300, which is the equivalent of $150 each; five cards could be sold for $300, which is the equivalent of $60 each. However, you must agree on a price for which an exchange can take place using the money in the game. A suggested price range for Resources cards would be in the $50 to $300 range, although any other price that the buyer and seller can agree on is acceptable.

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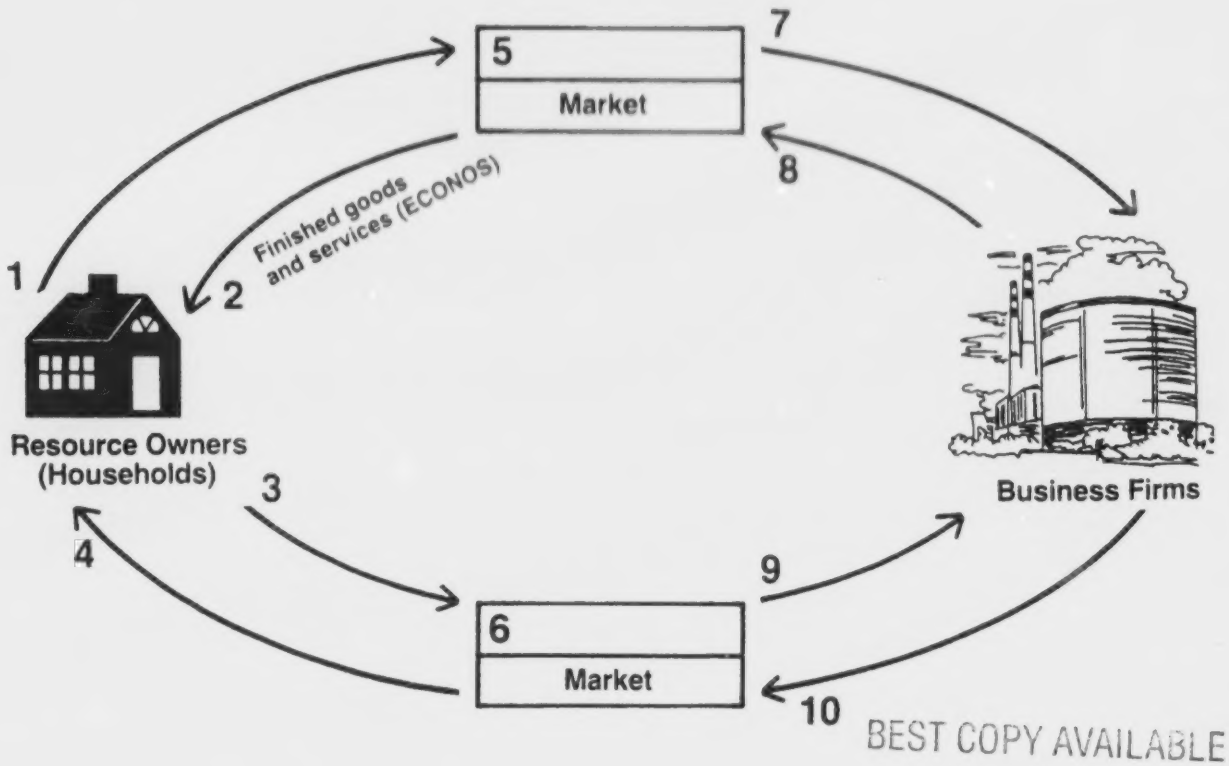
Handout 1-9-2
The Circular Flow of Economic Activity

I Owners of resources (families and individuals) supply the services of their land, labor, and capital to businesses in exchange for money income payments in the form of wages, salaries, rents, interest, and profits. Owners of the resources in turn use these income payments to purchase the finished goods and services supplied by the businesses. Business firms then use the proceeds from these sales to pay the resource owners for the services the firms receive by employing the resources. This is how the circular flow of resources, goods, services, and money income payments is established and maintained.

II In the circular flow chart (diagram) below, the curved lines with arrows show the direction of payments and products that flow to and from households and businesses. The outer set of lines shows the flow of income (money payments). The inner set of lines shows the flow of products and services for which the payments are made. Label the lines to describe what the two sets of flows consist of. (One label for the flow of products and services has already been written in to help you get started.)



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From *Master Curriculum Guide in Economics: Teaching Strategies for High School Economics Courses* 1985 Joint Council on Economic Education.

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III Now try to expand the circular flow chart to include government. Resource owners sell the services of some of their labor and other resources to governments as well as to businesses, and businesses sell some of their finished goods and services to governments as well as to individual resource owners. Moreover, governments collect money payments from both businesses and individual resource owners and also make money payments to both of these groups. In the space below list all the appropriate flows you can think of.

From Resource Owners (Families and Individuals) to Government

1 _____

2 _____

- **From Businesses to Governments**

1 _____

2 _____

- **From Government to Resource Owners**

1 _____

2 _____

- **From Government to Business Firms**

1 _____

2 _____

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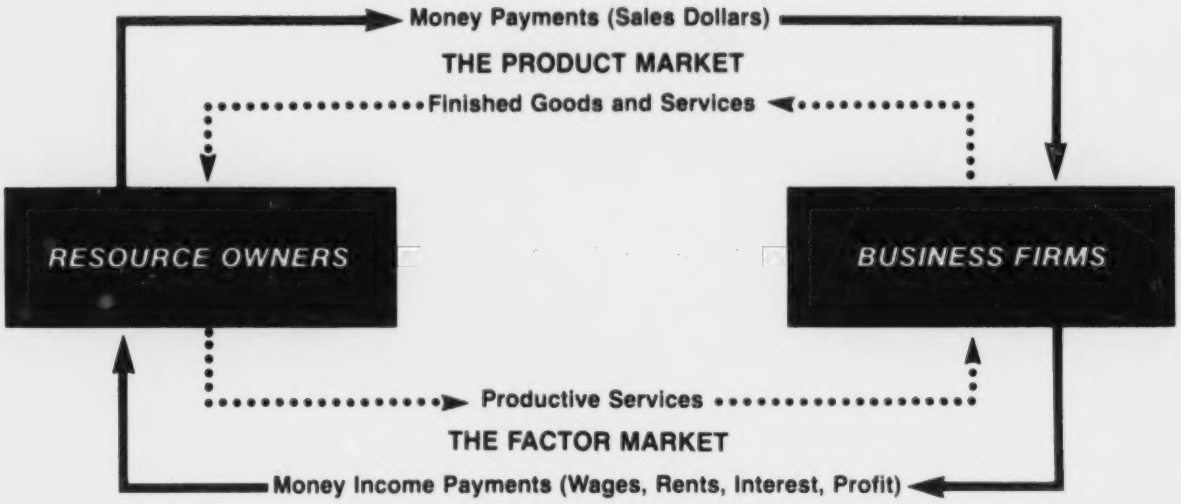
Handout 1-9-3

The Circular Flow of Resources, Goods, Services, and Money Payments



SOURCE: *Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts*, 2nd edition. New York: Joint Council on Economic Education, 1984, p. 23.

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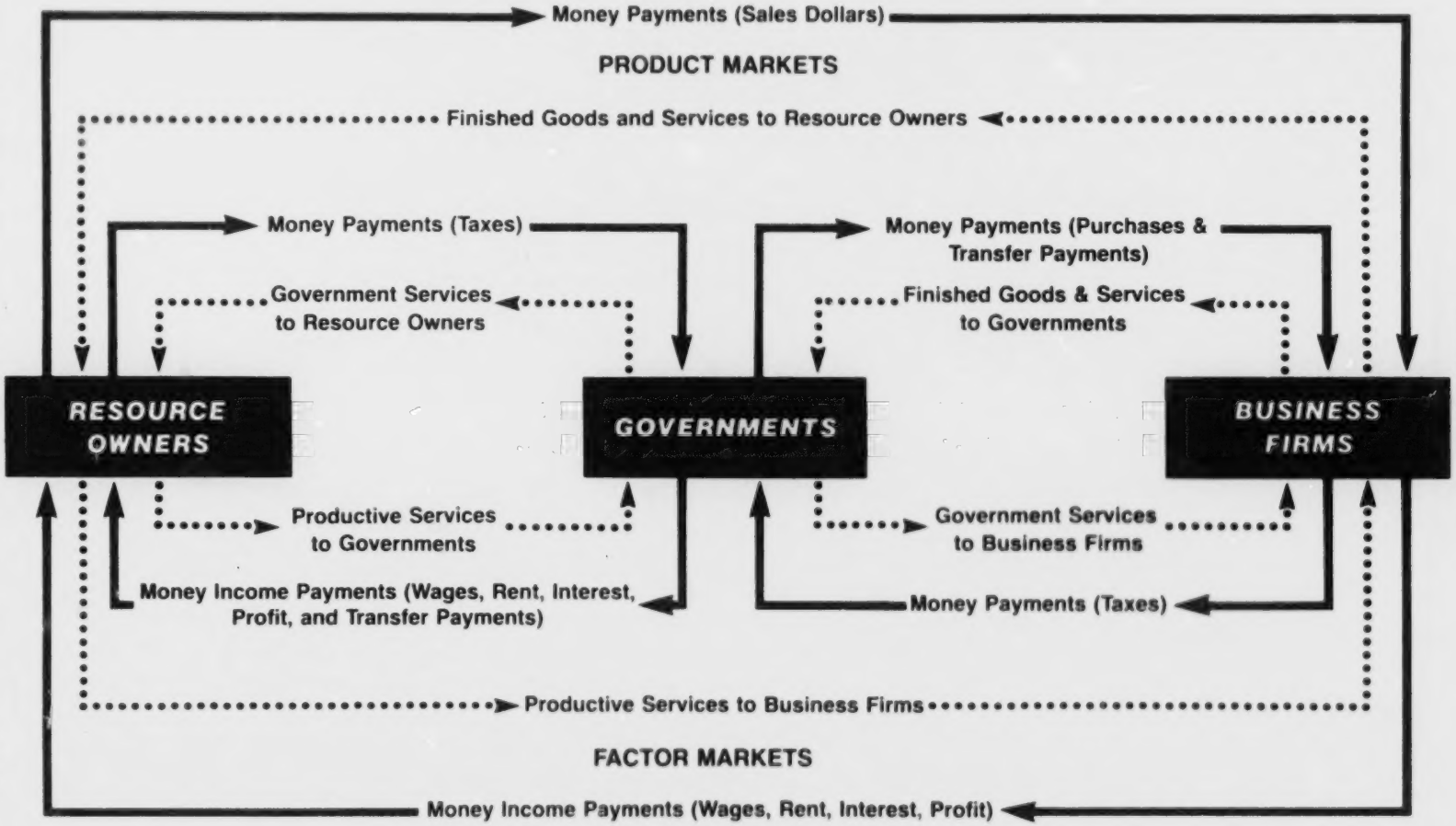
Handout 1-9-4

Governments in the Circular Flow of Resources, Goods, Services, and Money Payments


Money Payments (Sales Dollars)
PRODUCT MARKETS
Finished Goods and Services to Resource Owners
Money Payments (Taxes)
Money Payments (Purchases & Transfer Payments)
Government Services to Resource Owners
Finished Goods & Services to Governments
RESOURCE OWNERS
GOVERNMENTS
BUSINESS FIRMS
Productive Services to Governments
Government Services to Business Firms
Money Income Payments (Wages, Rent, Interest, Profit, and Transfer Payments)
Money Payments (Taxes)
Productive Services to Business Firms
FACTOR MARKETS
Money Income Payments (Wages, Rent, Interest, Profit)

SOURCE: *Master Curriculum Guide in Economics: A Framework for Teaching the Basic Concepts*, 2nd edition. New York: Joint Council on Economic Education. 1984, p. 32.

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Handout 1-10-1
Crime and Punishment:
The Economic View vs. the Sociological View

The differences between the economic way of thinking and the non-economic way of thinking can be illustrated by examining different approaches to reducing crime.

For years sociologists and psychiatrists conducted most of the studies that examined why people commit crimes. Most studies maintained crime resulted from such factors as social problems, poverty, slum environments, broken families, youth unemployment, poor education, and racial discrimination. They concluded that the way to prevent crime was to change these conditions. For example, anti-poverty programs, better education, and increased employment could reduce the crime rate.

Sociologists and psychiatrists viewed punishment as unimportant in determining whether people did or did not commit crimes. They maintained that criminals were sick and not rational.

Economists who have analyzed crime and criminal behavior take a different line. They regard crime as a rational choice among alternatives. In this view, people commit a particular crime or turn to a life of crime because they believe the advantages outweigh the disadvantages, a calculation that may be made in non-monetary as well as in monetary terms.

The economic approach maintains that crimes — apart from those of unbridled passion or psychological compulsion — are committed as the result of rational calculation. An economist might believe that personal characteristics and/or the social and family background may be the well-springs of criminal behavior. Yet these factors do not explain why such behavior actually does or does not take place. Since sociological approaches to the phenomena of crime and its prevention have not been notably successful, the simpler, clear-cut economic approach commands attention. At the very least, the hypothesis of economists provides some new insights, and it may even provide the groundwork for more fruitful policies of crime prevention.

Economic reasoning suggests two ways of lowering the crime rate. First, society can lower the benefits of committing crimes by providing economic opportunities for potential criminals to improve their lives. For example, an effective jobs program for low-income people should decrease the crime rate.

Secondly, society can increase the cost of committing crimes. This can be done by increasing the certainty and severity of punishment. Most studies show that catching and convicting more criminals is more effective in deterring crimes than just making the punishment more severe. However, increasing both the certainty and the severity of punishment will lower the crime rate.

Does it make any difference which view of crime is correct? Gordon Tullock and Richard McKenzie state the case for an economic approach to crime:

> "Ideas influence the real world. The fact that most specialists in the study of crime have believed, written, and taught that punishment does not deter crime has had an effect upon public policy. Legislatures have been more reluctant to appropriate money for prisons than they otherwise would have been; judges have tended to feel that imprisonment had little effect on crime and, hence, at the intellectual level in any event, were less willing to put people in jail for long periods of time. Further, the shortage of prisons so induced has made it impossible to keep people in jail for long periods of time for serious crimes. As a result, halfway houses (which are very inexpensive), parole, and probation have been resorted to on a very large scale, and this has sharply reduced the cost of [committing a] crime. This in turn leads to a rise in the crime rate that leads to further clogging of facilities and, hence, further reduction in the cost of [committing] crime. The rising crime rate in the United States to a very considerable extent can be blamed upon our intellectual community." (Tullock & McKenzie, 1985)

QUESTIONS ON CRIME AND PUNISHMENT

1. If you headed a task force on crime control, what policies would you recommend if:
   a. you supported the economic approach to crime and crime prevention?
   b. you supported the sociological approach to crime and crime prevention?
2. How would you go about proving which view of crime is correct?
3. Which view of crime do you think is correct? Why?

Source

Tullock, G. & McKenzie, R.B. *The New World of Economics.* Homewood, IL: Richard D. Irwin, 1985.

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UNIT 2
SUPPLY AND DEMAND

Student Handouts

Handout 2-1-1
Economic Reasoning Quiz

1. Sometimes consumers don't buy the things they like the best.
   A. True
   B. False

2. There are no substitutes for necessities such as food, clothing, and housing.
   A. True
   B. False

3. The more useful the product is, the higher its price will be.
   A. True
   B. False

4. Minimum wage laws cause low-income workers to lose their jobs.
   A. True
   B. False

5. Laws which forbid businesses from raising the prices of necessities are a good way to help the poor.
   A. True
   B. False

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Handout 2-1-2
Letter to *Capstone* Students

Dear *Capstone* Student:

What we think we know may not be accurate. Many people think they know about economics because they live in a world chock-full of economics. Actually, the economics we learn from experience can be incorrect or incomplete. Someone once said, "It ain't ignorance that causes so much trouble; it's all the things we know that ain't so!"

Individuals choose.

By now you realize that individuals influence their lives through the choices that they make. These choices can improve or reduce a person's quality of life. By "choosing or refusing," individuals respond to available alternatives and take actions which, they hope, improve their circumstances. One action all people take is to trade with other people. We eat food we did not grow, wear clothing we did not sew, and live in homes we did not build. This situation holds true around the world. Even in very poor countries, people trade. No one living in a society or even with one other person is truly self sufficient.

Different people value things differently.

People are different! We do not value things uniformly. We often quarrel. So how is it that we get along well enough to provide each other with food, clothing, shelter, entertainment, transportation, and other useful or enjoyable items? The market is a remarkable social invention which *helps* reconcile our differences and similarities in such a way that people can achieve their individual economic goals.

People use markets to make exchanges.

Markets are institutional arrangements that enable buyers and sellers to trade goods and services. Markets are everywhere in the world, and they are of many kinds. They are as easy to find as the corner grocery store, or as abstract as international commodities options markets. It can take thousands of people in different parts of the world to make a book bag or to produce a pair of shoes. How does this happen? Markets communicate incentives to producers as well as to consumers. Learn how markets use and communicate incentives and you will understand economic behavior very well.

How do you learn to understand markets? Just focus on three important ideas – *price*, *demand* and *supply in the markets* – and link them to individual choices and incentives. Then you will know enough to forecast individual economic behavior at least as well as weather forecasters can forecast the next day's weather. (Remember that weather forecasters are right some of the time – not all the time.)

A few final clues to remember as you study markets. First, prices indicate the relative value of different items. So you know that a $2,000 computer has a value in the market equal to the value of 2,000 cans of soda pop, if soda pop is one dollar per can, or to four $500 typewriters, or to one used car priced at $2,000.

Second, the law of demand predicts the effect of a particular incentive on consumers – i.e., it predicts how consumers will react to price changes. If prices increase, consumers tend to purchase *fewer* items than if prices are lower.

Third, notice that the opposite incentives are at work in supply. As prices increase, producers will supply *more* items than if prices were lower.

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When you study the market, you study yourself, too

The marketplace is a very important part of your life. Most of your exchanges (choices) will be made in it. Study this unit carefully. It will give you insight regarding why you and others do what you do. You will improve your ability to forecast behavior and solve some of the mysteries of the market.

Sincerely,

The *Capstone* Authors

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Handout 2-1-3
Let Me Predict
Group activity sheet

Directions: Predict the consumer choices of the following four people. Each has $50.00 to spend on the items listed in the catalog at the end of this activity sheet. The totals you arrive at *may* come to less than $50.00, but should well exceed $40.00.

JENNY JONES

J.J. is a 16-year-old enrolled in grade 11. She has just moved into the neighborhood and will start school tomorrow. J.J. is a good student and is concerned about making friends.

SHOPPING LIST

Item	Price
1.	
2.	
3.	
4.	
5.	
6.	

GEORGE HAMMER

G.H. is a 50-year-old carpenter. He is married, has three children (aged 18, 16, and 10). G.H. was told today that he is to start rough carpentry on the outside of houses tomorrow. In the past G.H. did finishing touches for carpentry on the insides of houses.

SHOPPING LIST

Item	Price
1.	
2.	
3.	
4.	
5.	
6.	

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PROFESSOR WASHINGTON

P.W. is an elderly woman just finishing her career. She lives in a small apartment, alone except for her cat Matilda. She spends most of her evening hours reading because her ability to hear is decreasing.

SHOPPING LIST

Item	Price
1.	
2.	
3.	
4.	
5.	
6.	

RICHIE MANN

R.M. is an entrepreneur who is unmarried. While he is only 30 years old, he has already earned a great deal of money. Although he is close to being a millionaire, he is a frugal man who likes to eat good food.

SHOPPING LIST

Item	Price
1.	
2.	
3.	
4.	
5.	
6.	

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CATALOG

Item	*Price*	*Item*	*Price*
Designer jeans	$26.00	Pen	$ 0.50
Current paperback novel	$ 6.00	Pencils (6)	$ 1.50
16-oz. hammer	$12.00	Soup	$ 0.50 per can
Name-brand sweater	$20.00	Silk necktie	$38.00
Men's long underwear	$10.00	Rubber-soled boots	$22.50
Dishwasher soap	$ 1.00	Soft tape measure	$ 4.00
Spiral notebook	$ 1.00	Catfood	$ 0.50 per can
Newspaper	$ 1.00	Light bulbs	$ 2.00
Wine	$ 7.00	Steaks (2)	$ 8.00
Men's dress shirt	$16.00	Sale-priced sweater	$12.00
Necktie	$14.00	Silver-plated pen and pencil set	$25.00
Chewing gum	$ 1.00	Reading lamp	$19.00

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Handout 2-1-4
Handy Dandy Guide (HDG)

1. People economize.
   - What is the choice being made?
   - Who is making the choice?

2. All choices involve cost.
   - What were the alternatives?
   - What is being refused?

3. People respond to incentives in predictable ways.
   - What are the potential benefits?
   - What are the potential costs?
   - Have they changed?

4. Economic systems influence individual choices and incentives.
   - Have the choices made by others influenced the individuals in the situation?
   - What are the rules of the system?
   - How might the rules have changed?

5. Voluntary trade creates wealth.
   - Why is exchange taking place or not taking place?
   - How do these choices influence trade and exchange?

6. The consequences of choices lie in the future.
   - What costs and benefits do you foresee?
   - How uncertain or risky is the choice being made?

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Handout 2-2-1
How to Play "A Market in Wheat"

Read these instructions carefully as your teacher reads them aloud.

1. Students who sell wheat wear arm bands labelled SELLERS.

2. The buyers of wheat do not need armbands.

3. Each buyer will have only one buy order at a time. It will say, "You are authorized to buy 10 bushels of wheat, paying as little as possible. If you pay more than _____ per bushel, for a total of _____, you lose money." The exact price and total will be written on the order. DO NOT REVEAL THE PRICE. Record the price on your buy order on your student score sheet. When the round starts, try to buy at the lowest price you can. You may buy at a price higher than that on your Buy Card in order to obtain your wheat. As soon as you have bought wheat, record the transaction on your score sheet. Then, turn the Buy and Sell cards in and get another buy order from the teacher. If you have bought no wheat during a round, get a different buy order from the teacher before the start of the next round.

4. Each seller will have only one sell order at a time. It will say, "You are authorized to SELL 10 bushels of wheat for as much as possible. If you accept less than _____ per bushel, for a total of _____, you lose money." The exact price and total will be written on the order. DO NOT REVEAL THE PRICE. Record the price on your sell order on your student score sheet. When the round starts, try to sell your wheat at the highest price you can. You may sell at a price lower than that on your sell order in order to get rid of your wheat. As soon as you have sold wheat, record the transaction on your score sheet. Then go to the teacher to report the selling price and get another card. If you have sold no wheat during a round, get a different sell order from the teacher before the start of the next round. Remember, the SELLER reports the price.

5. When the teacher says "Start," sellers and buyers should meet and try to agree on a price for 10 bushels of wheat. Any buyer can talk with any seller.

6. The goal of both buyers and sellers is to make a profit. The buyers do so by buying wheat for a lower price than is shown on their cards. The sellers do so by selling for a higher price than is on their cards.

7. All students are free to make as many transactions in a round as time permits.

8. Every time a seller reports an agreement to the teacher, it will be entered on the tally sheet the teacher is keeping. WATCH THE TALLY SHEET SO THAT YOU WILL KNOW WHAT PRICES ARE BEING PAID.

9. As soon as buyers and sellers receive new cards during a round, they should return to the market to try to reach another agreement — with each other or with different buyers and sellers.

How to Use the Score Sheet (Handout 2-2-2)

Keep track of your progress during the game on this score sheet. Tally your gains and losses by taking the difference between the dollar worth of the 10 bushels as stated on your card and the dollar worth of the transaction. If you are a buyer, you will make a gain if you buy at a lower total than the amount shown on your card. If you buy at a higher total, you will suffer a loss.

If you are a seller, you will gain if you sell at a higher total than the amount shown on your card. At a lower total, you will suffer a loss.

When the teacher instructs you to do so, total your gains and losses and write them in the designated spaces.

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Handout 2-2-2
Score Sheet for a "Market in Wheat"

Name _____ Class _____

Circle one: Buyer Seller

Transaction Number	Price per Bushel		Dollar Worth of 10 Bushels		Gain	Loss	Profit (gain minus loss)
	On Card	In Transaction	On Card	In Transaction			
TOTAL							

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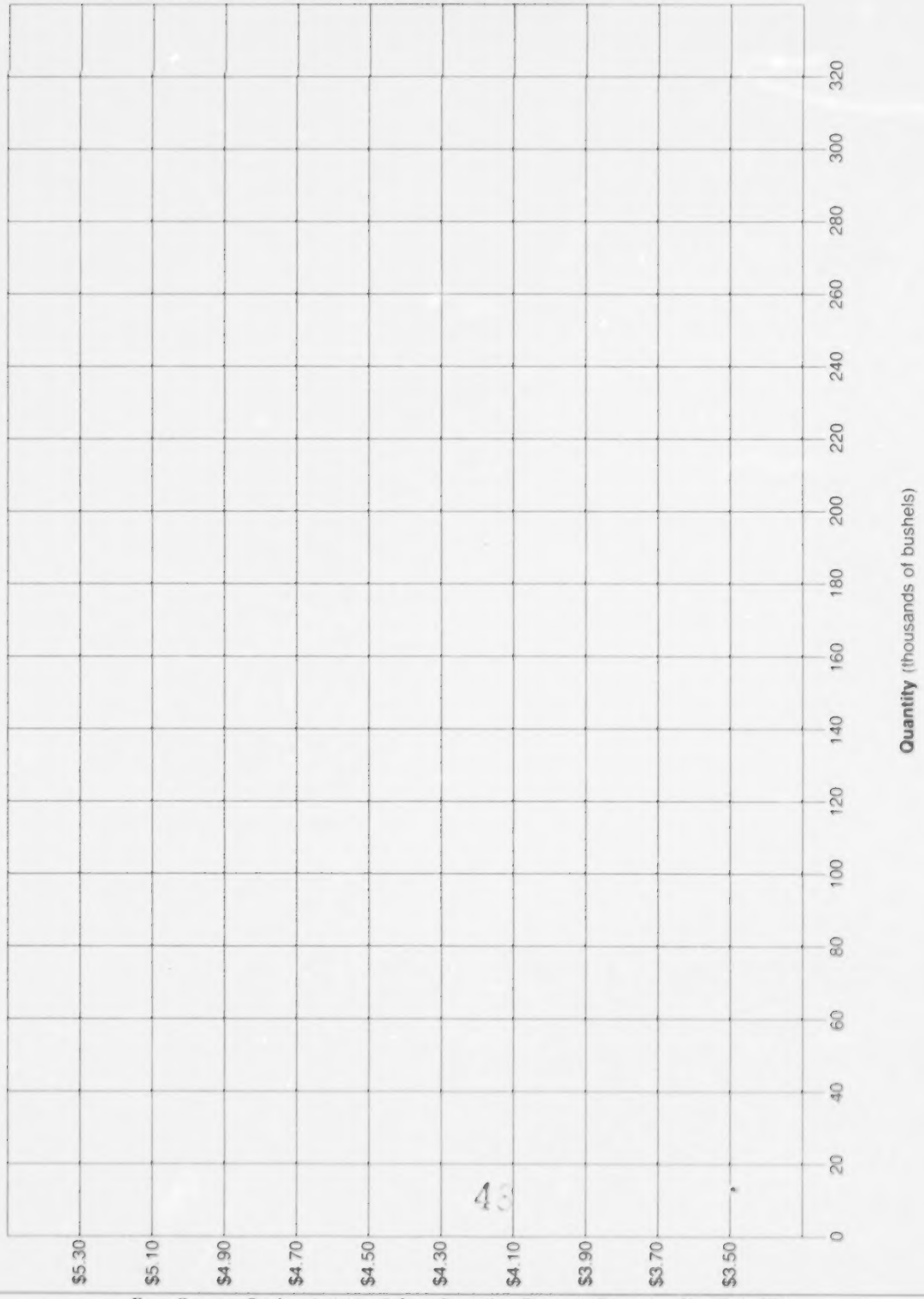
Handout 2-2-3
Wheat Supply and Demand



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Handout 2-2-4

SUPPLY SCHEDULE: In the following table, the supply schedule in the third column lists the cumulative number of bushels of wheat available for sale at the price indicated or at a higher price.

Price	No. of Sellers Willing to Sell 10 Bushels of Wheat at the Price Indicated or at a Higher Price	Supply Schedule
$3.50	4 sellers (= 40 bushels)	40
3.70	6 sellers (= 60 bushels)	100
3.90	6 sellers (= 60 bushels)	160
4.10	4 sellers (= 40 bushels)	200
4.30	4 sellers (= 40 bushels)	240
4.50	2 sellers (= 20 bushels)	260
4.70	2 sellers (= 20 bushels)	280
4.90	2 sellers (= 20 bushels)	300
5.10	2 sellers (= 20 bushels)	320

DEMAND SCHEDULE: In the following table, the demand schedule in the third column lists cumulative number of bushels of wheat buyers would be willing and able to buy at the price indicated or at a lower price.

Price	No. of Sellers Willing to Sell 10 Bushels of Wheat at the Price Indicated or at a Higher Price	Supply Schedule
$5.30	4 buyers (= 40 bushels)	40
5.10	4 buyers (= 40 bushels)	80
4.90	4 buyers (= 40 bushels)	120
3.70	4 buyers (= 40 bushels)	160
4.50	4 buyers (= 40 bushels)	200
4.30	4 buyers (= 40 bushels)	240
4.10	2 buyers (= 20 bushels)	260
3.90	2 buyers (= 20 bushels)	280
3.70	2 buyers (= 20 bushels)	300
3.50	2 buyers (= 20 bushels)	320

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Handout 2-3-1
Graphically Speaking: A Skill-Builder Handout

Introduction

Economics has a numbers problem — there is too much information for any person to absorb, remember, or even understand. Consider the daily economic activity that takes place in the U.S. economy. In round numbers, some 250 million people make an average of 10 economic transactions per day. On an average day (250,000,000 x 10 = 2,500,000,000) about 2.5 billion economic transactions are recorded. Multiply that number by 365 days, and the numbers in the United States alone become overwhelming. Yet this information can be studied to observe patterns, notice trends, and reach conclusions.

Directions

In order to make sense of this information, economists resort to drawings — conventionally called graphs (or charts) — to make the data easier to understand. In this lesson, you will create line graphs to display data and practice finding patterns in the data. By doing so, you will understand how graphs make it easier to analyze a large group of numbers.

Activity

1. In the box below, place a dot(.) anywhere you wish. Assume the dot(.) represents an airplane.

Describe where the airplane is located without adding anything to the box.

2. Using a ruler, divide the box in question 1 into a system of coordinates (a series of vertical and horizontal lines that are the same distance apart in both directions.

Describe where the airplane is located without adding anything additional to the box.

3. Number both the horizontal and vertical lines 1,2,3,4, etc. Use the lower lefthand corner of the box as the "0" (zero) point for both the horizontal and vertical numbering.

Describe where the airplane is located without adding anything to the box.

4. The airplane has now flown to a new location. The new location is as far away from the original location as possible. Place an asterisk (*) at the new location.

Describe where the new location of the airplane is without adding anything additional to the box.

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5. Draw the flight of the airplane as if it had flown by the shortest possible path to its new location.

CONGRATULATIONS. You have constructed a flight path in the form of a line graph! Your various numerical descriptions of the locations of the airplane as graphed here are called its coordinates.

6. In the box below, create a system of coordinates and graph the following information:

Japanese VCRs at Selected Prices

Prices	Number of VCRs Bought
$1000	0
800	500,000
600	1,500,000
400	4,000,000
200	10,000,000
100	25,000,000

7. Write a sentence that summarizes the information in this graph.

Sample answer: As the price of VCRs increased, the number of VCRs purchased decreased.

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8. On a separate piece of paper, graph the following information:

GROSS NATIONAL PRODUCT
(Billion of dollars)
(In 1982 prices)

Year	GNP
1970	2416.2
1971	2484.8
1972	2608.5
1973	2744.1
1974	2729.3
1975	2695.0
1976	2826.7
1977	2958.6
1978	3115.2
1979	3192.4
1980	3187.1
1981	3248.8
1982	3166.0
1983	3279.1
1984	3501.4
1985	3607.5
1986	3713.3
1987	3820.3

Sources: 1970-1986 from *Economic Report of the President*, February 1988, Table B-2, p.250; 1987 from *Economic Indicators*, Joint Economic Committee of the U.S. Congress, February 1988, top table, p.2.

9. Write a sentence that summarizes the information in this graph.

Sample answer: From 1970 to 1987, GNP increased with the exception of the years 1974, 1975, 1980 and 1982.

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Handout 2-4-1
Work or Play? That is the Question

List your abilities:

_____ _____

_____ _____

_____ _____

_____ _____

Number of hours that I am willing to work per week at each rate of hourly pay. (Use a seven-day week and remember to allow for your mandatory commitment to school.)

Hourly Pay	Number of hours willing to work per week
$ .75	_____
$ 1.00	_____
$ 1.50	_____
$ 2.50	_____
$ 3.35	_____
$ 5.00	_____
$ 7.50	_____
$ 10.00	_____
$ 15.00	_____
$ 25.00	_____
$100.00	_____

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Handout 2-5-1
Group Budget Form

Directions: You are living together and earn a total of $600 per month. Spend your money wisely. (You may not know at first what to put down for a given item. If you don't know, talk to one of your parents or some other adult who pays bills.)

Expense Category	*Month 1*	*Month 2*
Housing (apartment)	$250.00	$250.00
Basic foods	$	$
Party snacks	$	$
Clothing	$	$
Telephone	$	$
Fuel for heating	$	$
Electricity	$	$
Gasoline or bus fares	$	$
Pet food	$	$
Tickets for movies, concerts, and sports events	$	$
Savings	$	$
TOTAL	$	$

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Handout 2-6-1
Making Choices at the Margin

Directions Read the cases carefully and select the best possible alternative. Use marginal analysis to make your selection.

CASE ONE

A farmer has planted his crop. It cost him $50 per acre. He must decide whether to add fertilizer or not. The cost of fertilizer will be $25 per acre. The farmer estimates the crop will yield about $60 per acre revenue without fertilizer and about $60 per acre if fertilizer is used.

Should the farmer fertilize?

yes ( ) no ( )

CASE TWO

Sally purchased her Norwegian sweater one month ago for $160. It is attractive, but Sally now thinks it makes her look too old. Sally must decide to wear the Norwegian sweater or an old sweater she thinks is more stylish.

Should Sally wear a $160.00 sweater?

yes ( ) no ( )

CASE THREE

A cat in a pet store just had kittens. The owner estimates that each kitten will require $35 in food and shots before it is sold for $30.

Should the pet owner prepare them for sale?

yes ( ) no ( )

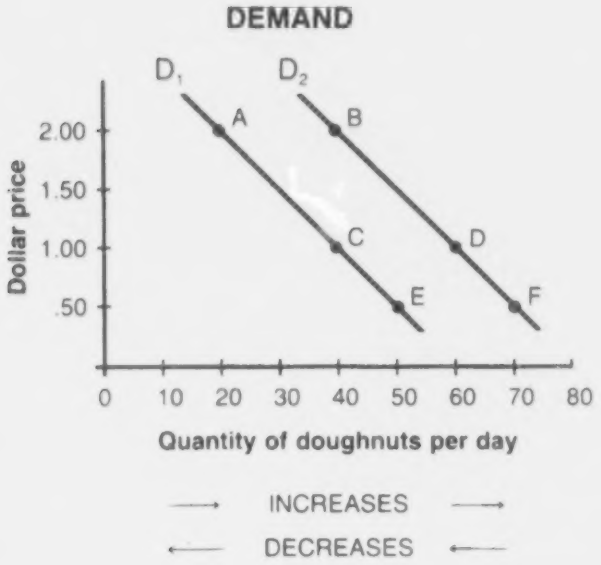
CASE FOUR

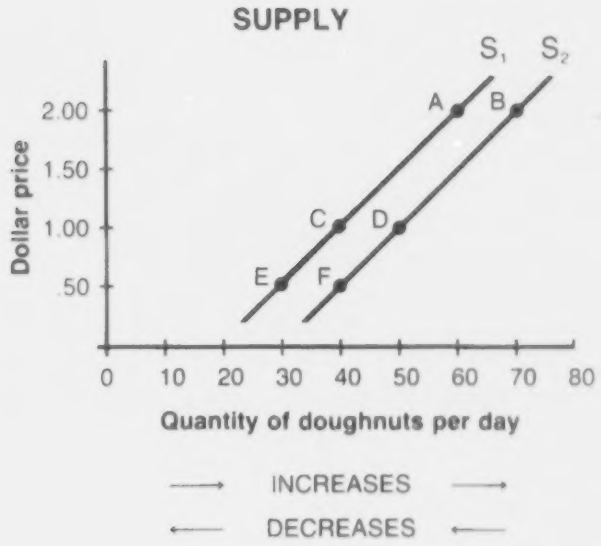
A South American government has invested $100 million to develop a new coffee bean that helps produce a tasty cup of coffee which doesn't stain a user's teeth after repeated drinking. The revenue from this venture is expected to be $25 million. The cost of raising and marketing the coffee in the U.S. is estimated at $38 million.

Should the South American government's officials attempt to sell the coffee bean in the United States?

yes ( ) no ( )

Handout 2-7-1
Shifts in Demand and Supply





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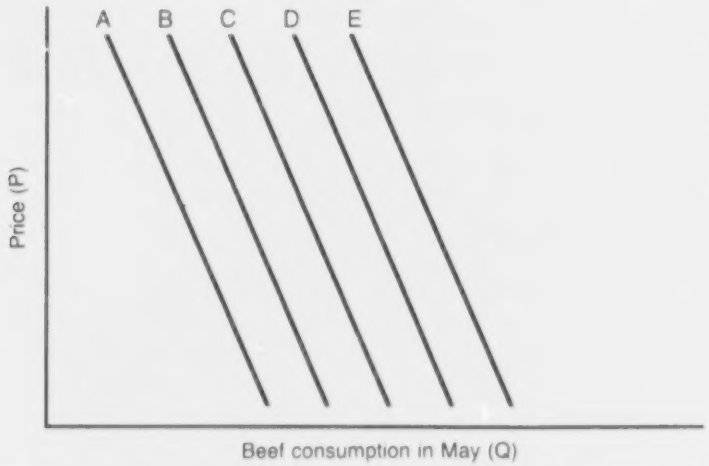
Handout 2-7-2
Reasons for Changes in Demand



Read the following eight newspaper headlines. In each case decide if the event will cause a change in the demand for beef. If so, determine if it is an increase or a decrease, and write the correct answer. Begin at curve *C*. If you think headline 1 means there will be a decrease in demand, write "decrease" in the first blank and "B" in the second blank; move to curve B to do headline 2. If you think demand will increase, write "increase" and "D" in the blanks for headline 1; move to curve D to do headline 2.

Move only one curve at a time. Do not skip from say *A* to *C* even if you think the headline means there will be a large change in demand. Do not go beyond the five curves. If you are at *A* and the next headline implies a decrease in demand, you goofed somewhere. There is one headline which implies that the demand for beef does not change.

1 PRICE OF BEEF TO RISE IN JUNE
Demand _____ Curve _____

2 MILLIONS OF ALIENS SWELL U.S. POPULATION
Demand _____ Curve _____

3 PORK PRICES DROP
Demand _____ Curve _____

4 SURGEON GENERAL WARNS THAT EATING BEEF CAN BE HAZARDOUS TO HEALTH
Demand _____ Curve _____

5 MIGRATORY BIRDS HEAD NORTH; SUMMER AWAITS
Demand _____ Curve _____

6 REAL INCOME FOR AMERICANS DROPS 3RD MONTH IN ROW
Demand _____ Curve _____

7 CHARCOAL SHORTAGE THREATENS MEMORIAL DAY COOKOUTS
Demand _____ Curve _____

8 NATIONWIDE FAD: THE DISCO-BURGER
Demand _____ Curve _____

Optional bonus: Categorize each change in demand in the exercise above according to the reason that demand changed. Write the number of the headline(s) next to the reason for the change in demand. One category will have two headline numbers.

_____ A change in consumer expectations
_____ A change in consumer tastes
_____ A change in the number of consumers in the market
_____ A change in income
_____ A change in the price of a substitute good
_____ A change in the price of a complementary good

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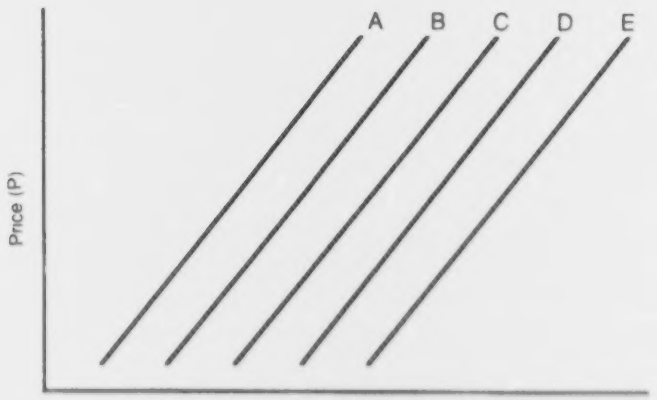
Handout 2-7-3
Reasons for Changes in Supply



Read the following seven newspaper headlines. In each case, decide if the event will cause any change in the supply of cars. If so, determine if it is an increase or a decrease, and write the correct answer. Begin at curve *C*. If you think headline 1 means there will be a decrease in supply, write "decrease" in the first blank and "B" in the second blank; move to curve B to do headline 2. If you think supply will increase, write "increase" and "D" in the blanks for headline 2; move to curve "D" to do headline 3.

Move only one curve at a time. Do not skip from say *A* to *C* even if you think the headline means there will be a large change in supply. Do not go beyond the five curves. If you are at *A* and the next headline implies a decrease in supply, you goofed somewhere. There is one headline which implies that the supply of cars does not change.

1 AUTO WORKERS UNION AGREES TO WAGE AND FRINGE CUTS
Supply _____ Curve _____

2 NEW ROBOT TECHNOLOGY INCREASES EFFICIENCY
Supply _____ Curve _____

3 NATIONWIDE AUTO STRIKE BEGAN AT MIDNIGHT
Supply _____ Curve _____

4 NEW AUTO IMPORT QUOTAS REDUCE FLOW OF FOREIGN CARS
Supply _____ Curve _____

5 COST OF STEEL RISES
Supply _____ Curve _____

6 AUTO PRODUCER GOES BANKRUPT, CLOSES OPERATION
Supply _____ Curve _____

7 BUYERS REJECT NEW MODELS
Supply _____ Curve _____

Optional bonus: Categorize each change in supply according to the reason that affected supply. Write the number of the headline next to the reason for the change in supply. In some cases, more than one headline could be matched to a reason.

_____ A change in the cost of production
_____ A change in technology
_____ Natural disaster/other event that causes decrease in production
_____ Government policies

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Handout 2-8-1
Price Floors and Ceilings

1 What is the market price?

2 What quantity is demanded and what quantity is supplied at the market price?
Quantity demanded _____
Quantity supplied _____

3 What quantity is demanded and what quantity is supplied if the government passes a law requiring the price to be $30?
Quantity demanded _____
Quantity supplied _____

4 What quantity would be demanded and what quantity would be supplied if the government passes a law requiring the price to be $80?
Quantity demanded _____
Quantity supplied _____

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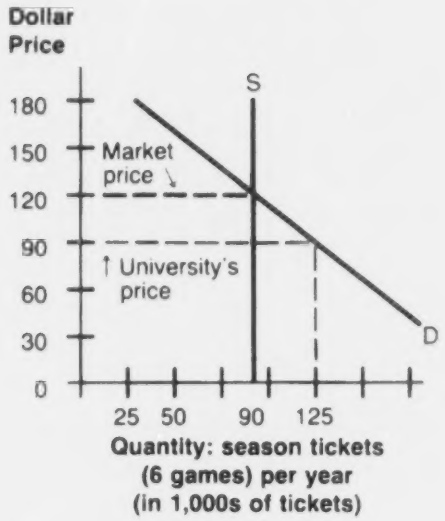
Handout 2-8-2
Big Football University



Instructions: For these questions, assume the university has set the price of a season ticket at $90. It will take action against people who it discovers reselling tickets at a higher price, that is, it will try to prevent "black market" or "scalper" sales (sales above $90).

1 Answer these questions on the basis of the information in the graph:

- **a** Why is the supply curve a vertical line?
- **b** How many tickets are available at the university's price?
- **c** How many tickets do football fans wish to buy at the university's price?
- **d** What is the problem with respect to quantity supplied and quantity demanded?
- **e** Does the graph illustrate a price floor or a price ceiling?

2 What are some means of eliminating the shortage of tickets in order to prevent "black marketing" or "scalping"?

3 For each solution you put forward, answer the following questions:

- **a** Will the solution eliminate the shortage?
- **b** Is the solution fair?
- **c** Who benefits from the solution? Who loses?
- **d** What is the best solution?

Handout 2-8-3
The Minimum Wage and Unemployment

Imagine that you are a member of the U.S. House of Representatives. You must decide whether to vote *yes* or *no* on a bill that would raise the minimum wage. In committee hearings on the bill, you heard testimony from people who favor the increase and from people who are against it. For example, you heard one spokeswoman say:

> "We're experiencing high inflation. The minimum wage must be raised accordingly. Otherwise, the working poor will receive wages that are miserably below what is needed to provide food, housing, and other necessities. Every worker has a right to earn a decent, living wage. The present minimum is too low and is therefore unjust and unfair."

And you heard an opponent of the minimum wage state:

> "The minimum wage should be allowed to expire. It creates unemployment, especially among disadvantaged minorities and teenagers. It creates incentives for businesses to substitute machines for people. People without jobs are worse off than people with low-paying jobs. This is particularly true for teenagers. Teenage unemployment is much higher than adult unemployment. One of the reasons is that the minimum wage reduces the number of jobs for teenagers with few skills, for at the minimum wage business would rather hire older people who are more skilled or who have more work experience. Such hiring decisions tend to discriminate against young blacks who, on the average, have less education and fewer skills than their white counterparts. Don't raise the minimum wage; eliminate it."

Now you must decide how to vote.

QUESTIONS:

1. What is the issue?

2. Draw a supply and demand graph that illustrates the issue. Does the issue involve a price floor, a price ceiling, or neither?

3. What broad social goals should you consider as you decide how to vote on this issue?

4. What are some alternative means of achieving these goals?

5. What are some advantages and disadvantages of each alternative? Be sure to consider who gains and who loses by each alternative.

6. Would you vote to raise the minimum wage? Why or why not?

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Handout 2-8-4
Rent Controls and Affordable Housing

Imagine that the voters in your city are going to vote on a law that would (1) roll back all rents on houses and apartments to the rent levels of two years ago, and (2) freeze rents at those levels. At the many town meetings held on this proposal, citizens have argued furiously. Among the comments you heard were:

> "Rents are too high for people on fixed incomes like my husband and me. With prices going up and up, our pension and social security checks just aren't enough. Everyone should have the right to decent housing. We have worked all our lives. Now all we ask is that rents be kept at an affordable level. That's the fair thing to do."

You also heard from the opposite side:

> "Rent controls cause housing shortages. And housing shortages allow rental property owners to discriminate against any group they think is undesirable — families with children or pets, minorities, senior citizens. Also, with rent control, the rent the owners get over a period of years won't be enough to properly maintain many older apartments. This will lead to blighted neighborhoods. If access to housing is the problem, raising the incomes of poor people is the answer, not rent controls."

Now you must decide how to vote.

QUESTIONS:

1. What is the issue?

2. Draw a supply and demand graph that illustrates the issue. Does the issue involve a price floor, a price ceiling, or neither?

3. What broad social goals should you consider as you decide how to vote on this issue?

4. What are some alternative means of achieving these goals?

5. What are some advantages of each alternative? Be sure to consider who gains and who loses by each alternative.

6. How would you vote on the issue? Why?

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Handout 2-9-1
Handy Dandy Guide (HDG)

1) People economize.

   What choice is being made?

   Who is making the choice?

2) All choices involve costs.

   What are the alternatives?

   What is being refused?

3) People respond to incentives in predictable ways.

   What are the potential benefits?

   What are the potential costs?

   Have they changed?

4) Economic systems influence individual choices and incentives.

   Have choices made by others influenced the individuals in the situation?

   What are the rules of the system?

   Have the rules changed?

5) Voluntary trade creates wealth.

   Why is exchange taking place or not taking place?

   How do these choices influence trade and exchange?

6) The consequences of choice lie in the future.

   What costs and benefits do you foresee?

   How uncertain and risky is the choice being made?

Handout 2-9-2
Becoming a "Profit-Making Prophet" by Using Economics

1. If everything else remained the same, the quantity of doughnuts supplied at $2.00 per dozen would be _____ (greater than, smaller than, the same as) the quantity of doughnuts supplied at $1.00 per dozen.

   Why?

2. Explain why the quantity of doughnuts demanded increases when prices fall?

3. If the price of steaks increases, what will happen to the demand for steak sauce? Diagram the change on a graph.

4. Using supply and demand analysis and the graph, demonstrate what will happen to the price of corn if a hail storm destroys most of the corn grown in the midwest.

   How will the price change affect consumer behavior?

5. If the cost of steel increases, what effect would this have on the supply of automobiles if one assumes steel is an important resource in auto production?

   Why?

6. If the price of stereo equipment increases, what effect will this have on the demand for record/cassette albums?

7. Why is the price of a quart of water less than a quart of petroleum?

8. What would be a successful pricing strategy to reduce the long lines of people waiting to buy tickets at a rock concert?

CONTINUE YOUR ANALYSIS USING HANDOUT 2-9-1.

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Handout 2-9-3
It's Your Turn
A "Real World" Supply and Demand Application

You have been studying how the market forces of supply and demand are subject to change for many different reasons. When these dynamic forces change, they in turn can affect how resources are allocated to markets, as well as the prices of goods and services and the quantities offered for sale. Using any current resources available to you, find a newspaper article which describes a change in the supply of or demand for any good or service available in your local markets. Read the article and then answer the questions which follow. One of the questions asks you to diagram the change in supply or demand, if any, and to predict, based on the laws of supply and demand, the effect of the change on equilibrium price and quantity.

Here are some topics about which you might find articles:

Changes in supply may be caused by any of the following:
- a crop failure caused by pests or weather,
- the imposition of or the lifting of import quotas,
- a change in the productivity of a firm.

Changes in demand may be caused by any of the following:
- changes in tastes or styles,
- an increase or decrease in income,
- a change in the prices of substitutes.

ARTICLE TITLE: _____

SOURCE: _____

DATE OF PUBLICATION: _____

1. State the topic of the article you have selected. Briefly describe the main idea contained in the article.

2. Tell whether your article discusses a change in supply or demand, both, or neither. Tell whether the change is an increase or a decrease.

3. Based on your article, which determinant of supply and demand explains why the change in supply or demand took place? For example, was it caused by a change in consumer tastes and preferences or was it caused by a change in the cost of production?

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4. Using the supply and demand curve shown, draw in the new supply and/or demand curve based on the case you described in your article. Give the illustration an appropriate title on the line provided.

A MARKET FOR _____
(title)

5. By applying the appropriate part of the law of supply and demand, use the space below to make a prediction about the change in equilibrium price and quantity that should result in your case study.

Change in price:

Change in quantity:

6. Based on your predictions from this case study, would you expect any other related markets to change as well? For an example, you can think back to the work done in lesson 8, which analyzed how changes in one market affected other markets.

For your convenience, one sample news article is included in this lesson. The material which immediately follows uses this article to provide a set of sample answers for the questions posed in this handout.

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ARTICLE TITLE: Corn acreage could fall to '83 level.

SOURCE: *Chicago Tribune*

DATE OF PUBLICATION: March 29, 1987

1. State the topic of the article you have selected. Briefly describe the main idea contained in the article.

   The 1987 acreage reduction program was designed to reduce corn production to its lowest level since 1983. A recent corn surplus along with declining corn exports has depressed the price of corn.

2. Tell whether your article discusses a change in supply or demand, both, or neither. Tell whether the change is an increase or a decrease.

   The government acreage program decreases supply. The decline in corn exports is a decrease in demand.

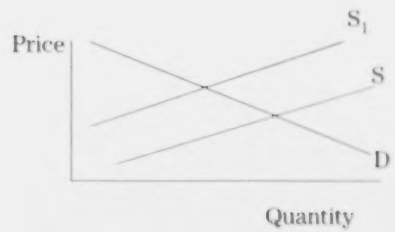
3. Based on your article, which determinant of supply or demand explains why the change in supply or demand is taking place. For example, is it being caused by a change in consumer tastes and preferences or is it being caused by a change in the cost of production?

   Supply: Change is due to a government policy intended to cut production.

   Demand: Change is due to a decline in exports of corn.

4. Using the supply and demand curve shown below, draw in the new supply based on the case you described in your article. Give the illustration an appropriate title on the line provided.

A MARKET FOR corn
(title)



5. By applying the appropriate part of the law of supply and demand, use the space below to make a prediction about the change in equilibrium price and quantity that should result in your case study.

   Change in price: Corn would command a higher price.

   Change in quantity: Less corn would be produced.

6. Based on your predictions from this case study, would you expect any other related markets to change as well? For example, think back to the work done in lesson 8, which analyzed how changes in one market affected other markets.

   If less corn is produced, some of the surplus corn could be used up. If corn prices rose, the farmer would be helped. But the rise would also affect consumers, who then would pay more for such items as cornflakes and beef.

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Corn acreage could fall to '83 level

WASHINGTON [Reuters] – U.S. corn acreage this year could drop to the lowest level since the unsurpassed cuts of 1983 as farmers sign on for tempting government programs that pay them to idle farmland.

This summer's plantings total could rank as one of the lowest in the United States in 60 years, Agriculture Department officials said. Mounting stocks of corn, which depress prices, would be consumed if farmers plant less.

The department releases its official plantings report on Tuesday. Agriculture Department analysts said the figures will likely show a sharp drop in acreage to as low as 65 million acres, down 22 percent from last year's plantings of 83.3 million acres.

Assuming the sharp drop in plantings, corn production will also decrease significantly. Analysts said the 1987 figure could drop by more than 1 billion bushels to about 7 billion.

Expected heavy farmer participation in the government's 1987 acreage reduction program will be the significant factor in the acreage drop, department feed grain analysts said.

"There's no question that there will be a sharp decrease in corn acreage," an analyst said. "It's difficult for any U.S. corn farmer to not go along with the program this year."

Farmers enrolling in the federal program are required to set aside 20 percent of their base corn acreage and then are eligible for payments of $2 per bushel by idling an additional 15 percent.

Last year 85 percent of the U.S. corn base was enrolled in the government farm program. Because of more tempting incentives this year and the prospects of the government providing average payments to corn farmers of $135 per acre, analysts expect as much as 90 percent of the U.S. corn acreage to be signed up in the program.

"Farmers can't afford to not be in the program," an analyst said.

If analysts' unofficial estimates prove correct, the drop in U.S. corn acreage will be the largest since 1983 when farmers idled 22 million acres in the Payment-In-Kind program.

That year, pressured by an alarming increase in government corn stocks and continuing overproduction, the government implemented an innovative program to encourage farmers to cut back on crop acreage.

Farmers were required to idle 10 percent of their acreage to be eligible for government program benefits, then were paid cash to idle an additional 10 percent. But if farmers were willing to set aside an additional 10 percent to 30 percent of their corn acreage or opted to forego planting completely, the government rewarded them with grain from its stockpile. Acreage reductions of 50 percent or more were common as farmers readily responded to the government incentives.

Declining U.S. corn exports have steadily reduced cash corn prices to farmers. As recently as the early 1980s, U.S. corn accounted for more than 75 percent of the world corn market. This share has eroded to a 60 percent market share.

Increasing world competition and production and a general decline in world corn trade have caused the decrease in the U.S. market share.

As corn exports have declined, surplus stocks in the United States have mounted, making the need to reduce acreage and production even more critical. The government owns more than 1 billion bushels of corn and has another 5.5 billion bushels stored under loan.

Corn acreage in the United States, with the exception of 1983, has been in the 80 million-acre range for the last 10 years.

In 1986, U.S. farmers obtained record corn yields averaging 119.3 bushels per acre. "We now have absolutely no trouble producing an 8 billion-bushel crop on only 80 million acres or so," an analyst said.

U.S. corn acreage will probably level out at 65 million acres as long as government program provisions remain the same, analysts said.

"To get to the level of 60 million acres, we would have to provide more incentives," one analyst said.

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Handout 2-9-4
Supply and Demand Applications

Directions

For each situation, do the following:

a. Tell whether supply and demand increased or decreased.

b. Which determinant caused supply or demand to change?

c. Graph the situation.

d. Predict what will happen to the market clearing price, quantity demanded, and quantity supplied.

Problem Situations

1. Cesar Chavez conducted a national grape boycott to aid him in unionizing grape harvesters. How would you expect this boycott to affect the grape industry?

2. Farmers are concerned about their low incomes. To correct this problem, some farmers argue that the government should pay farmers to take some land out of production. Illustrate the effect that such a program might have. Who would be more pleased — farmers or consumers?

3. Show the effect of voluntary export quotas by the Japanese auto industry on prices of cars imported into the U.S. How might the domestic car industry be affected by such as action?

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Handout 2-10-1
RATIONING

You are a member of a surgical team in a leading U.S. hospital. As a team, you must decide which patients should receive kidney transplants as donated organs become available. Recently your hospital received an organ donation from the family of an accident victim. As best as your team can determine, each of the five candidates' bodies would accept the kidney without major threat of rejection. The cost of this operation, surgical fees and hospital care, would come to approximately $10,000. Decide which patient will receive the kidney transplant operation. Be prepared to explain your choice to the class by identifying the criteria you used to evaluate each patient.

POTENTIAL KIDNEY TRANSPLANT RECIPIENTS

1. A 10-year-old Indian girl living in Bombay with wealthy parents. She is an only child who will not live to be an adult if she does not receive a new kidney. Her parents are willing to pay all the costs involved in the operation and treatment. They have even offered to pay a donor $10,000 for a healthy kidney.

2. A 40-year-old Canadian male construction worker with a wife and five children. Until recently, he provided most of the family's income. Now his wife works at part-time jobs to earn the family income. His insurance would cover about one-half of the costs of the operation and post-operative medical care.

3. A 20-year-old male college student studying for the ministry. His family is middle-income. His mother and father work as teachers in the local public school district. Their medical insurance does not cover this medical problem, so the family would be forced to borrow the money for the operation. He and his sister would have to postpone their college educations until these expenses are paid for.

4. A 55-year-old male political leader from Latin America who spent his life fighting for the rights of the poor and uneducated people of his country. He and his wife are very popular, well respected people at home and in the international community for their humanitarian work. Their work is just bearing political fruit, and he may be elected president of his country if a kidney transplant allows his health to improve. He has no money, but the hospital could probably start a successful donation campaign to cover the costs of this operation. The publicity of the operation also would boost the prestige of the hospital.

5. A 30-year-old female working as a sales representative for the regional telephone company. She has no family. Her parents died in a car accident when she was 18. She plans to marry as soon as her health improves as a result of the kidney transplant. Her health insurance will cover the costs of the operation.

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Handout 2-10-2
RATIONING

Rationing Plan A

Senator John Jackson introduced a bill in Congress which would require hospitals to provide kidney transplants to any U.S. citizens regardless of their ability to pay the costs of the operation and treatment. He did this to "insure that organs are given to those who need them most, not just to those who can best afford them."

- What effect would this bill have on your decision as a hospital team evaluating the five kidney transplant patients?

- If you had to choose the person who most needed the operation, would you now change your earlier decision?

- Would such a law change the supply of donated organs? If so, how? If not, why not?

- Would such a law increase or decrease the number of people who wish to obtain an organ transplant?

Rationing Plan B

Representative Marlen Mill, reacting to the large number of kidney transplants provided for non-U.S. citizens, introduced a bill to require an "Americans First" policy. This policy would require all hospitals and organ procurement agencies to provide organ transplants to foreign nationals only after conducting a lengthy, thorough and unsuccessful search for a suitable U.S. recipient.

- Would such a law change your earlier decision on the transplant recipient?

- Would such a law increase or decrease the supply of donated kidneys?

- Would such a law help increase or decrease the number of people who want an organ transplant?

- How might other countries react to such a law?

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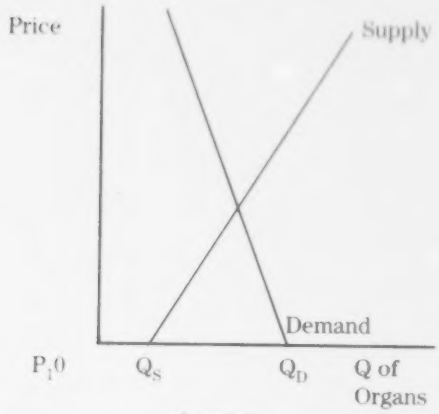
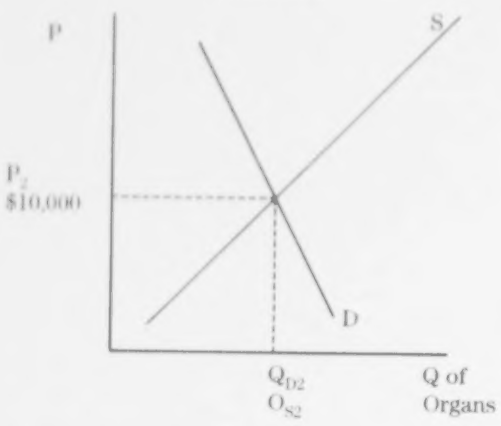
Rationing Plan C

Economist Stanley Goodhart suggests that nations should engage in an open market for organ transplants, allowing legal sales of body organs. Living donors would receive the market price for any donated organ. Donors wishing to donate organs at the time of their death could designate who should receive the funds generated by the sale of their organs. Dr. Goodhart asserts that the current price of zero is too low and fails to encourage organ donations. Higher prices would increase the quantity of organs supplied and reduce the quantity of organs demanded. The graphs below depict the situation as he describes it.

Situation 1



Situation 2



- What effect would such a policy have on the decision you made to give an organ transplant?
- Would the policy increase or decrease the supply of donated organs?
- Would the policy increase or decrease the number of organ transplants people want to receive?

UNIT 3
PRODUCERS AND CONSUMERS

Student Handouts

Handout 3-1-1
Letter to *Capstone* Students

Dear *Capstone* Student:

Decision making

This unit introduces a variety of topics organized around the most obvious players in the economy — consumers and producers. The early lessons focus on how consumers and producers make decisions. This focus on making decisions should come as no surprise. Many courses in high school are planned to help you make good decisions. We think, however, that this course does it better. Why? People too often think that their decisions are all or nothing propositions. More often, decisions are marginal decisions. It is a matter of how much more or how much less.

Future benefits

For example, you will probably take a test at the end of this unit. Imagine that you have studied for two hours. Is it worth it to study an additional half hour? Your decision, of course, depends on how much future benefit you think you will receive. If you think an additional half hour of study may result in your earning a "B" rather than a "C", you may decide that additional study is in your best interest. But if you think that additional study might contribute little to helping you do well, it is likely that you would choose not to study more. If you thought that additional, last minute cramming might actually confuse or interfere with what you have already learned, it is obvious that additional study would not be a good idea.

Marginal analysis

This stress on analyzing marginal costs and benefits enables us to encourage you to consider another key idea in reasoning economically. Perhaps you recall from the *Handy Dandy Guide* in Unit 1 that all consequences lie in the future. **Economic choices are made in the present with an eye fixed firmly on future consequences.** This simple idea can be tough to grasp. Our knowledge of the past weighs heavily on our minds. Consider this example. A good reason for seniors to complete school is that they already have completed eleven years of the total required for graduation. Quickly, you can see that this is another marginal problem. But, when it is stated this way, it focuses our attention on the past. In economics, we shift the focus to the future. The question to be decided is: Are the additional benefits to be gained from completing a high school education worth the additional cost of one more year of staying in school? When asked this way, you are looking ahead to events that you can still influence, not behind to events that can no longer be changed.

It might appear that this unit is only concerned about making decisions. While that is largely true, other ideas related to the decisions of consumers and producers are also introduced. Some key questions to be considered are:

Why do some people make more money than others?

What is productivity and how can we get more of it?

What is it like to negotiate a contract between labor and management?

We hope that you enjoy this unit half as much as we enjoyed writing it.

Sincerely,

The *Capstone* Authors

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Handout 3-1-2
Economic Reasoning Quiz

1. If you spend $3000 on car repairs and the car still doesn't work properly, you should forget about the $3000 when making a decision on whether to spend another $1000 on repairs.
   A. True
   B. False

2. Because businesses can price their products at any level, they always charge consumers the highest possible price.
   A. True
   B. False

3. Monopolists charge the highest possible price because they have consumers at their mercy.
   A. True
   B. False

4. Middlemen and speculators increase the price of things without performing services for consumers.
   A. True
   B. False

5. If the productivity of labor (output per worker) increases, the nation's standard of living increases.
   A. True
   B. False

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Handout 3-2-1
Marginal Decisions

What is Marginal Analysis?

Economics can help you make careful economic decisions. Most economic decisions are made at the margin. Marginal means additional. Nothing really matters when you make a decision except the additional costs and additional benefits that you gain as you look at each alternative. Some people think that most decisions are all or nothing propositions — you decide one way or the other. In fact, most decisions are marginal — what matters most are the additional costs and benefits. Here is an example.

Facing the Facts of Finals Week

Maggie spends a lot of time with her close friends, Agnes and Hilda. As usual, they got together after school in Maggie's parents' tiny kitchen to plan their Monday evening, the first night of final exam week. Agnes and Hilda did not have any exams until Wednesday. They suggested going to the Rock-N-Roll Big Event — a night of classic rock concert films, featuring the Beatles, at a local theater.

Maggie moaned. "I planned on staying home and studying for my history final tonight. I have Mrs. Garbowski for history. Her tests cover the three most important things in her history class: dates, dates, and dates! I really think that I should study for her test."

Hilda teased Maggie about her decision. "Maggie, use your head. You already studied. Before every other test, you studied for three hours and did well on the test. You don't have to study this time. You will still have averaged over two hours of study for every history test this semester."

Quiz

What sort of decision was Maggie making?

A. An average decision.
B. A marginal decision.

Marginal Analysis

The answer is that Maggie is practicing marginal decision making. Hilda is not. Maggie understands that she must look at future behavior to get an accurate picture of the costs and benefits of her actions. While studying for previous tests may have helped her to prepare for this test, the important decision is whether *additional* study time would help improve her grade over the grade that she might earn if she didn't study. For another example, look at Handout 3-2-2.

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Handout 3-2-2
Fred Fisher Buys a Fishing Boat

As consumers, we make marginal decisions all the time. When quality or prices increase, we have to decide whether the goods and services are worth the extra costs.

Fred Fisher likes fishing. He spends a lot of time every summer out on Bass Lake looking for (and never quite finding) that lunker bass he has heard some of the old timers talk about. This year he wants to buy a small fishing boat so he can get out on the lake more often. Fred went to a Mary's Marked-Down Marina to look for a 12-foot aluminum boat and motor. This is what he found:

BOATS	PRICES
1. 12' boat with 4 horse power motor	$1000
2. 12' boat with 4 horse power motor with reinforced aluminum structure	1500
3. 12' boat with 4 horse power motor with reinforced aluminum structure and a live well — especially designed to hold lunker bass	2000

Fred sat down on a couch on the sales floor and pondered his options. Finally, he decided that the $1000 boat was what he wanted.

Quiz

What sort of decision did Fred make?

A. An all-or-nothing decision.
B. A marginal decision.

Marginal Analysis

Fred made a decision about what he values most in a fishing boat. This was a marginal decision — not an all-or-nothing situation. Fred figured that the additional benefit of having a reinforced aluminum structure or a live well was not worth the additional cost of $500 or $1000. For another example, see Handout 3-2-3.

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Handout 3-2-3
The Andersons Go to London

Bette's grandparents — the Andersons — are newly retired and planning their first trip abroad. They are going to London — a first for everyone in their family. They live on a fixed income, so they try to be careful in using their savings. Their question now is to decide which travel plan is best. Here are the options:

Plan #1 Round trip airfare, stay 1 week in a 1-star hotel,
1 tour each day, 2 meals provided $3500

Plan #2 Round trip airfare, stay 1 week in a 2-star hotel,
2 daily tours, 2 meals provided $4500

Plan #3 Round trip airfare, stay 1 week in a 4-star hotel,
2 daily tours, 3 meals provided, tickets to 3 London plays $7500

The Andersons decided that they favored Plan #2. They started to explain their decision to Bette. She instantly recognized their explanation as a marginal analysis.

Work with a partner to answer the following two questions:

1. What do you think Bette's grandparents said in deciding on Plan #2? (Hint: use the words "additional cost" and "additional benefit" in your response.)

2. Imagine that the Andersons changed their decision. Instead of Plan #2, suppose that they selected Plan #3. What changes in the situation (increased additional costs or increased benefits) might have occurred that would make them change their decision?

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Handout 3-3-1
Tree Production Worksheet

The company you work for is heavily involved in harvesting trees for the production of lumber and paper products. The company has just obtained a lease on a large tract of land in a remote area of the state. Management has decided that it will be best to harvest these trees as quickly as possible since (1) work crews will have to be paid additional living expenses for working in this area and (2) replanting should get started as early as possible to maximize profits. Cut and processed trees are to be stored nearby in a large area next to a railroad line, so storage and shipping are no problem.

You must determine how many workers should be employed to harvest the trees. Use the following information:

1. You have a fixed amount of land available from which to cut trees — approximately 2500 acres.

2. You have a fixed amount of capital equipment assigned to this task — trucks, chain saws, skidders, etc., worth approximately $300,000.

3. Because of poor weather conditions, company policy forbids employees to work overtime.

Tree Production

No. of Workers (1)	No. of Trees Cut & Loaded per Day (2)	No. of Additional Trees Produced per Day (3)	(4)	(5)
1	8	8		
2	18	10		
3	40	22		
4	89	49		
5	130	41		
6	150			
7	159			
8	164			
9	167			
10	169			

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Handout 3-3-2
How Much Gunk Should We Accept?

You are an economic adviser to the U.S. Environmental Protection Agency. You are in charge of recommending new "gunk control standards" (GCSs) for the smurf sticker industry. What set of standards (options) would you suggest, given the following facts? (You may select only one option.)

Fact 1: BAT (Best available technology) standards require the industry to use whatever control technology cleans up the most gunk (option 10).

Fact 2: Each successive alternative involves a tightening of standards to allow less gunk into the environment. For example, option 3 allows less gunk than option 2.

Fact 3: Technical studies by the National Academy of Sciences and the Environmental Protection Agency have generated the following data:

GCS Options	Estimated Health and Other Benefits (millions of $)	Estimated Cost of Industry Compliance (millions of $)
1	$ 10	$ 5
2	20	11
3	30	18
4	40	26
5	50	35
6	60	47
7	70	61
8	80	80
9	90	105
10 (BAT)	100	155

1. Which option would you recommend? Why?

2. Write a brief report justifying your decision.

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Handout 3-4-1
Sunk Costs

What is a Sunk Cost?

Consumers and producers are interested in costs. Neither deliberately makes decisions that result in financial losses. Yet, we sometimes get confused by concentrating on costs that we incurred in the past. It is important to understand that the costs that matter are in the future.

Sunk costs are ones that have been incurred as a result of past decisions. Sunk costs are GONE, OUT-OF-HERE — nothing can be done about them. Economists call these *sunk costs*, but the term *past costs* would convey the same idea.

This activity focuses on how businesses and consumers look at costs. Do businesses and consumers, for example, always act to recover all of their sunk costs? Would a consumer or a business deliberately take a "loss?" Consider the following examples.

Four Sunk Cost Cases

1. Barney the Grocer bought a case of cucumbers for $10, but they were misplaced in the storage room for a few days. The cucumbers are about to spoil — they are good for one more day. Barney places the whole case on sale for $3.

   A. What is the sunk cost?

   B. Is Barney a smart grocer? Why?

2. Dobby bought a new stereo system for $500. He loved his stereo equipment and used it constantly. Unfortunately, two weeks after his purchase, a new company came out with a completely new type of stereo system called TapFlex. Overnight, the market for conventional stereo systems died. Dobby estimates that he could sell his conventional stereo now for about $50.

   A. What is the sunk cost?

   B. Should Dobby keep the stereo? Why?

3. The Cleavers pay $500 a month for a leased apartment. They are committed to spend one year in another city so that Mrs. Cleaver can complete a special training program. The best offer they have to sublet the apartment is $400 per month.

   A. What is the sunk cost?

   B. Should the Cleavers sublet the apartment? Why?

4. Ricky bought his first car for $2000 — approximately the market value of an old Sprinto with 80,000 miles on it. Two months after buying it, Ricky took the car to the Nelson Family Garage to have a few repairs done. Old Mr. Nelson charged Ricky $250 for the work. Two days later, Ricky returned to Nelson's with still more car trouble. This time, Mr. Nelson said that the Diabolic Dissonance Switch had to be replaced or the car would never run. It would cost $400 to have it fixed. Mr. Nelson offered him $150 for scrap if Ricky did not want the car fixed. If he had it repaired, Mr. Nelson figured the car would be worth about $1800. Ricky decided to have the car fixed.

   A. What is the sunk cost?

   B. Why do you think Ricky decided to have the car fixed?

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Handout 3-5-1
Some Career Plans

Directions List up to five career options that you are considering. Next, explain the minimal amount of training or education usually required of people who wish to compete for these jobs in the labor markets.

Career	*Training/Education Needed*
1. Economist	Ph.D. in Economics
2.	
3.	
4.	
5.	
6.	

Now select your *top* preference and give reasons for your choice, taking account of advantages and disadvantages.

Choice: _____

Advantages: _____

_____

Disadvantages: _____

_____

Reason: _____

_____

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Handout 3-5-2
Demand Creates Income

Perhaps you are thinking about what you might eventually do for a living after you have completed your formal education. As just about anyone will tell you, career decisions are among the most important you ever will make.

Career decisions are important because we all spend a lot of effort trying to convince people to provide us voluntarily with income. We have to persuade employers that we can provide them with skill or knowledge that they need in order to produce goods and services.

In fact, the skill or knowledge we can provide is only one of the important considerations. Equally important, the demand for productive services is *derived* from the *demand* for the goods or services that they produce.

Examples of Derived Demand

1. Bruce Springsteen makes millions as a recording artist because: a great many people are willing to buy his records.

2. Fast food restaurants hire teenagers to work because: people want to buy hamburgers at all times — day or night, weekends or weekdays.

   (Hint: As you examine each of the following examples, ask yourself: What is the final good or service that creates the derived demand for the type of work in question?)

3. Nursing homes and hospitals compete with each other to hire nurses because: _____

   _____

4. Plumbers can often make a good income because: _____

   _____

5. The President of the United States is paid $200,000 annually because: _____

   _____

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Handout 3-5-3
The Marketplace for Labor

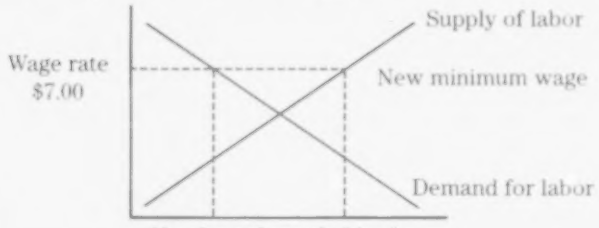
Most of the income that Americans receive comes from ownership of *human capital*. This may seem an unusual term. When we think of capital, we think of machines, plants, and equipment. How do people accumulate human capital? They do it by improving knowledge and skills — things other people may be willing to pay for. Vocational training, college education, and work experience, for example, can enhance an individual's human capital.

Demand for human capital can be analyzed in the same way as demand for any other productive resource. At higher prices, employers will hire fewer people, and at lower prices employers will hire more. Each hiring decision is a marginal one. Employers will continue to hire as long as the additional revenue they receive by hiring someone is more than the additional cost.

Similarly, the supply of human capital is like the supply of any other resource. Higher prices (wages) encourage people to enter particular labor markets. Lower prices (wages) tend to discourage people from entering particular markets.

Imagine that government leaders decide that businesses are not paying enough income to workers. Elected officials pass a new, much higher minimum wage — $7 per hour.

1. This change is illustrated on the graph below.



2. Setting the higher minimum wage will cause a surplus of workers to develop. Many people would want to work at jobs paying the new minimum wage, but employers would not want to hire them. They would begin to seek substitutes for workers. What are some substitutes for workers?

3. Some people would be willing to work at the wage rates below the new minimum. What alternatives might they seek?

4. Predict who would be hurt by the new minimum wage. Who, for example, would receive less income?

5. Predict who would be helped by the new minimum wage. Who, for example, would receive more income?

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Handout 3-6-1

WORKSHEET FOR CALCULATING PRODUCTIVITY

	ROUND 1	ROUND 2	ROUND 3	ROUND 4	ROUND 5
Number of Airplanes Produced	4				
Cost of Materials (25¢ Per Airplane)	1.00				
Number of Workers	4				
Wages ($1.00 Per Worker)	4.00				
$2.00 Rent For Factory (Per Desk)	2.00				
Investment in Capital Goods (50¢ Per Scissors)	50				
Total Cost	7.50				
Cost Per Airplane (Average Cost)	1.88				
Total Time Worked (3 Minutes Multiplied By Number of Workers)	12 Minutes				
Output Per Minute Worked (Number of Airplanes Divided By Total Number of Minutes Worked)	4 Divided By 12 Equals 0.333				

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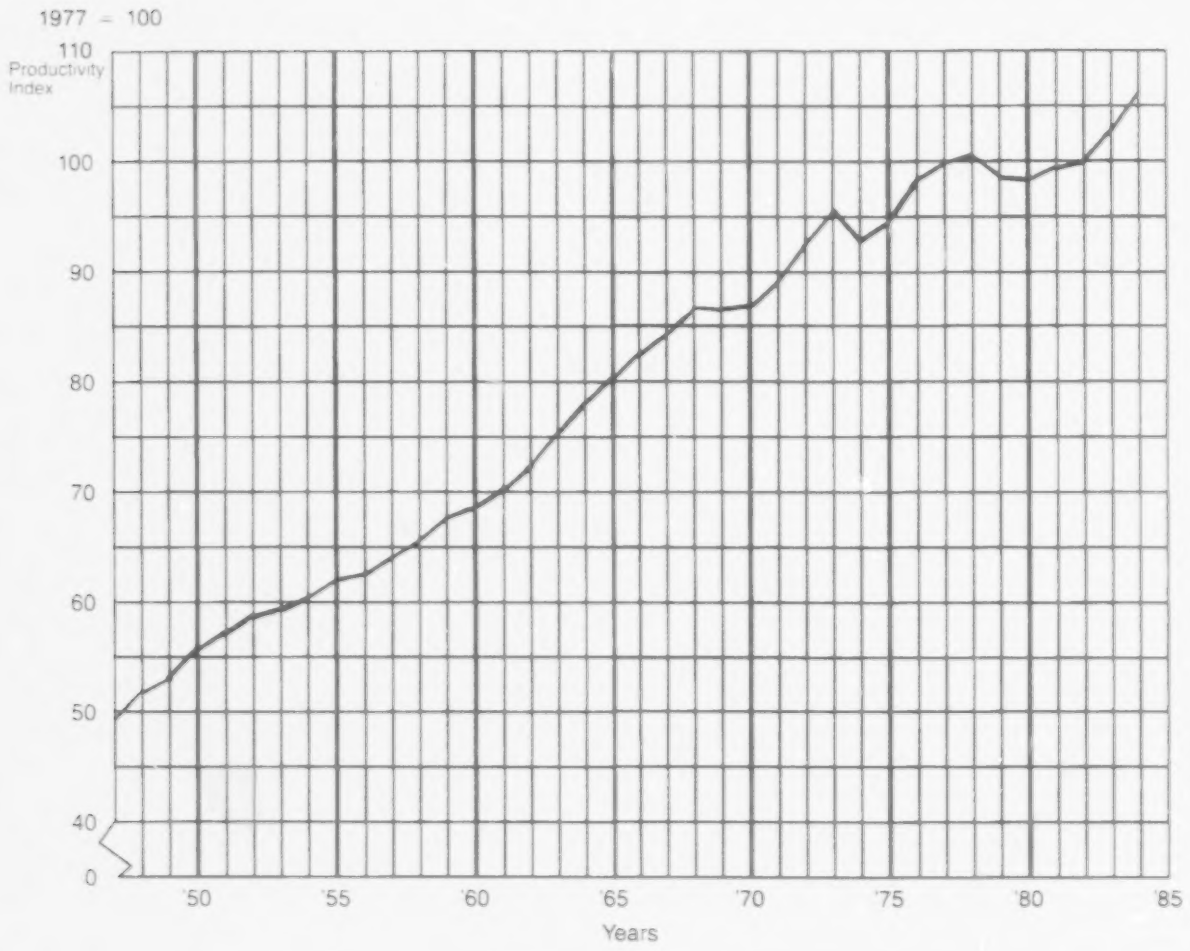
Handout 3-6-2

OUTPUT PER HOUR OF LABOR INPUT

(total private business sector)



SOURCE: *Economic Report of the President, February 1985* (Washington, D.C.: U.S. Government Printing Office, 1985).

1 What has been the trend of productivity in the United States since 1948? What were some of the causes of that trend?

2 What was the trend between 1977 and 1982?

3 What were some of the effects of the trend between 1977 and 1982?

4 What happened to productivity in 1983–84?

From *Master Curriculum Guide in Economics: Teaching Strategies for High School Economics Courses*, 1985. Joint Council on Economic Education, 2 Park Avenue.

Handout 3-7-1

Different Types of Market Structure

Market Structure	No. of Firms	Type of Product	Conditions of Entry	Type of Price-setting Behavior	Existence of Nonprice Competition	Examples
Pure (perfect) competition	Many	Homogeneous	Free or very easy	Determined by market	None	
Monopolistic competition	Many	Differentiated	Relatively easy	Determined by market plus small amount of discretion	Some, especially by advertising	
Pure oligopoly	Few	Homogeneous	Substantial barriers	Determined by market plus considerable discretion. Possible price leadership	Some, such as on-time delivery	
Differentiated oligopoly	Few	Differentiated	Substantial barriers	Determined by market plus considerable discretion. Possible price leadership	Extensive	
Monopoly	One	Only product of its kind available	Entry can be blocked	Establishes price at most profitable level possible	Advertising of firm's "image"	

From *Master Curriculum Guide in Economics: Teaching Strategies for High School Economics Courses, 1985. Joint Council on Economic Education.*

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Handout 3-7-2
Who's the Monopolist?

Inspector Mark Etts is trying to find out which suspect is the monopolist. He knows that each represents a firm in a different market structure, but which is which? Use the quotations below, the information in Handout 3-7-1, and the process of elimination to help Inspector Etts specify the market structure for each suspect. (Each of the five market structures in Handout 3-7-1 is included and is used only once.)

Suspect 1 "Look, I'm not the monopolist. I've got plenty of competition. If I tried to raise my price, I'd lose business to Giant Industries. No, sir, I wait for them to raise prices, and I follow along behind."

Suspect 2 "I've got more problems than you have. New shops like mine are opening all the time. I have to spend money on advertising to convince people that my shop is unique and different."

Suspect 3 "I can't afford to advertise. It would eat up what little profit I make. Besides, what good would it do? My product is the same as everyone else's."

Suspect 4 "Well, my product is like no one else's. I work hard to make sure that my firm stays out front to avoid the perils of cutthroat competition. An orderly market and a fair price. That's our motto."

Suspect 5 "Good for you. But, Inspector, I'm not a monopolist. I know it's tough to break into our market, what with the huge advertising costs. Brand recognition is important. But I'm not guilty."

Suspect	Market Structure
1	_____
2	_____
3	_____
4	_____
5	_____

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Handout 3-7-3
The Beer Case

You have been hired as a consulting economist for the Antitrust Division of the U.S. Department of Justice. The following case is given to you for review. Use what you know about markets plus the information in the case to suggest a policy to the assistant attorney general in charge of your antitrust actions.

Facts: Regional Brewers, Inc. has announced plans to merge with Foamy, Inc., another brewer. The following table shows the leading brewers and their respective shares of total beer sales in the past year.

1. Muggs & Steins, Inc.	20%
2. Jones Breweries, Inc.	16%
3. Big Kegs, Inc.	10%
4. Schaatzer, Inc.	8%
5. Regional Brewers, Inc.	7%
6. Foamy, Inc.	5%
7. D. B. Bottlers	4%
8. Great Southern Brewery, Inc.	4%
9. All others	26%

The beer business has been getting more and more concentrated because smaller brewers have either been going out of business or have merged with larger brewers. Thus, the leading firms, especially the two largest, have been getting more and more of the beer business. The four largest brewers now account for 54% of sales; the eight largest account for 74%.

Arguments: Some staff attorneys at Justice believe the merger should be opposed. They think a merger of the fifth and sixth largest brewers will continue what the attorneys regard as unhealthy trends toward bigger breweries, toward more concentration of sales among fewer firms, and, therefore, toward less competition. Large advertising campaigns by the biggest brewers are further increasing the difficulties of small brewers and raising barriers to the entry of potential competitors.

Attorneys for the companies involved have filed papers arguing that neither brewer can survive in the long run without the merger. The merger would create a new company with a larger advertising budget and with national brewing and marketing capability. They argue that if their companies fail, most of the sales they account for will go to the top two companies and thus concentrate the market to an even greater extent. They argue that one strong competitor is better than two companies out of business.

Recommendation

Should the Justice Department oppose the merger? What is your recommendation and why?

You should consider the following questions in arriving at an answer:

1. What kind of market structure is present?
2. What trends are taking place in the beer business?
3. What barriers to entry are there, if any?
4. Why is the Department of Justice concerned with the trend in the beer market?
5. What goal does the Department of Justice seem most concerned with?
6. Are there other goals that could also be considered?
7. How well do you think each of the alternatives meets the goals that you regard as the most important?

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Handout 3-7-4
The Monopoly Case

Amalgamated Hi-Tech Industries, Inc. (AHTI) became a monopoly in the market for on-board computers for speedboats when the last of its competitors folded a year ago. At present, all imports are banned. The assistant attorney general wants your opinion about whether the Justice Department should start a lawsuit to force AHTI to split into six separate competing companies.

Facts

AHTI, like all monopolists, is limiting its production to the most profitable level and therefore charging a higher price than it might be able to charge in a competitive market, given the prevailing demand schedule for the product. Its profits are not outrageously high per dollar invested compared to the national average for all industries. Estimates prepared by the department staff show that, under competitive conditions, consumers would buy 90,000 computers annually at a price of $142 each (for total sales of $12,780,000). AHTI is charging $177 and limiting production to 75,000 (for total sales of $13,275,000).

Arguments

Staff attorneys argue that consumers are being bilked because of AHTI's monopoly. Prices would be lower and output higher if AHTI were broken up into separate companies. By breaking up the monopoly, the resulting output and price should be closer to what would be the case under competitive conditions. The staff says that the monopoly distorts resource allocation and allows AHTI to be sloppy and inefficient.

The documents filed by AHTI's attorneys argue that since AHTI's present profits are not unusually high, higher output and lower prices would not allow for a reasonable profit. Furthermore, they say that breaking the company up will harm consumers, not help them. They point out that the Justice Department report assumes that each of the small companies could produce about as efficiently as one big company. They say this assumption is wrong: AHTI's size allows large-scale production which is more efficient than producing the same total amount at approximately six smaller factories. Thus, they argue, breaking up AHTI would cause a price increase, not a decrease. Finally, AHTI argues that if other producers can make a reasonable profit, they will enter the market and compete. Nobody is stopping them.

Recommendation

In your report to the assistant attorney general, what will you recommend and why?

Consider the following as you make your decision:

1. What are the key issues in this case?
2. What are some policy alternatives?
3. What are some important goals that can be used to evaluate the policy alternatives?
4. How well does each alternative meet these goals?

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Handout 3-7-5
Consumer Protection?

Lately you have become interested in the problems and responsibilities of consumers. You have joined a local consumers' rights activist organization. The representative from your congressional district is to speak before your group tonight, and you are to deliver a brief reaction to her speech. You have obtained a draft copy of her address so that you can prepare your remarks more thoroughly. A portion of her speech reads:

> "... and the recession drove many, many small businesses under. They had neither the size nor financial strength to compete with big companies during the recent hard times.
>
> "Now, I am worried about the effect the closing of these small businesses will have on consumers, particularly the closing of the retail establishments — the local grocery, clothing store, drug store, appliance store, and so on. I am concerned that with the loss of these businesses, big companies will have less competition and will be able to raise prices and gouge the consumer. Protecting consumers means protecting competition. And protecting competition means protecting competitors from the unfair advantages of large companies.
>
> "I am, therefore, introducing legislation to mandate minimum fair prices in certain retail industries. These minimum prices will ensure that large companies do not undercut the prices that small businesses can profitably offer. Competition will be preserved and consumers will benefit ..."

How will you respond to this portion of the representative's speech? Write your reaction from the consumer's viewpoint, and tell whether you agree with her or not, and why.

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Handout 3-8-1
Labor-Management Interdependence Exercise

General Information

Almost every year workers and employers try to agree on the way they will work together in the coming year. This process is called *bargaining* or *collective bargaining*. When the workers and the employers do agree, they sign a contract that requires them to keep the promises they have made to each other. A contract is a legal paper signed by representatives of the workers and employers that lists all the items that describe how they will work together. A contract will include the salaries of the workers, how many hours they will work, and other specifications about conditions of work.

Workers try to get as much as they can for themselves in bargaining. Employers try to maintain production levels without increasing costs.

This exercise will show you what happens between the employer and the workers when they try to agree on wages and working conditions for the next year. To help you get a clearer picture of what is happening, you will be given a job as an employer or as a member of the workers' union. You will have some time to study the information that you have been given.

Then you will be given time to meet with others who have the same job you have. At this meeting you should discuss *what you want* from the other side and *how you are going to get it*. Next, you will meet with the members of the other side and begin bargaining. You will try to reach an agreement about the next year's contract. REMEMBER, the object is to reach agreement, although you may have to take some intermediate steps in order to reach it.

The information on this Handout is available to both groups. The next Handout you receive will show *your* demands, and only your group will see it. Be sure that no one on the other side sees your demands Handout.

General Information About the Employer

The employer, Board Foot, Inc., is one of the largest sellers of lumber in your state. Board Foot has four competitors in the state.

General Information About the Union

The Union, Circle Saws Local 1, represents the 150 workers at Board Foot. It would take three to four weeks to train replacements for the workers. There are not enough non-union workers to operate the Board Foot plant if there is a strike.

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List of Bargaining Demands of Management and Union

	Current Agreement	*Union Demands*	*Management Demands*
Wages:	$8 per hour	15 percent increase	No more than a 5 percent increase
Overtime:	Time-and-one-half for overtime	Double-time for overtime	Stay at time-and-one-half for overtime
Hours:	40-hour standard	36-hour standard, overtime payable after 36 hours	Keep 40-hour standard
Paid Holidays:	Seven	Want eight	Maintain seven

Industry Patterns

1. The union has been averaging about 8 percent increase in wages with Board Foot's competitors in recent contracts.
2. In the last contracts with two of Board Foot's competitors, the Circle Saws have won double-time for overtime.
3. In the last contracts with Board Foot's largest competitor, the union got a 37-1/2 hour week.

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Handout 3-8-2
Union Demands and Information Available Only to Employee Representatives

Importance and Value of Union Demands

Demands	*Rank (1: Most Important)*	*Satisfaction Points*
Wages	1	1 for each percentage point above 5% (max. 10 points for 15% raise)
Overtime	2	8
36-hour week (standard)	3	6
Eighth paid holiday	4	3
		Total Points 27

Reasons for Demands

Wages are ranked first because the company profits have increased without labor making equal gains. The younger members of the union (about 40%) really want a wage increase. Inflation has increased, and your members want more money in wages to cover that.

The 36-hour week is wanted by all members of the union because "shorter hours mean more pay in overtime." This 36-hour week can take any form, but they would like the 4-hour cutback in work time to be on Friday afternoon. If a 36-hour week cannot be won, you should try for any number less than a 40-hour week, and this might be a good item to use in a trade.

Other Information

The union estimates that its strike fund will allow the Circle Saws to make a 30-day strike. It is possible that the union could get money from the National Teamster Union, of which they are members. Help is unlikely if the National Teamsters go on strike, which is a possibility at this time.

NOTE: It may be helpful to look at the importance of the demand to the Circle Saws in deciding your willingness to strike. Also, consider alternatives other than strikes, and how long it would take to make up lost wages from a strike. Remember, if you force the company to make unsound compromises, you may be hurting the ability of the company to compete within the lumber market. If this happens, the company may be forced out of business.

The History of Labor Relations Between Board Foot and Circle Saw Local 1

Board Foot has reported a steady but moderate increase in profits over the past eight years. In the past, the company has generally been successful in getting a contract with terms they want.

It must be noted that Board Foot, in the past, has not granted many of the union's demands unless their competitors were forced to give these working conditions to their employees first.

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Handout 3-8-3
Management Demands and Information Available Only to Management

Importance and Value of Management Demands

Demands	*Rank (1: most important)*	*Satisfaction Points*
Wages	1	1 for each percentage point below 15% (max. 10 points for 5% raise)
Overtime (time and 1/2)	2	8
40-hour standard week	3	6
7 (only) paid holidays	4	3
		Total Points 27

Reasons for Demands

As a representative of Board Foot management, you believe wages must not increase for three reasons.

First, Board Foot is losing some of its customers to other lumber sellers. If management is to keep from losing customers, it must keep profit and productivity levels the same as they are now. An increase in wages could result in the layoff of eight to ten men, some of them workers with much experience.

Second, a large wage increase asked by the union would raise Board Foot's wage costs, both regular and overtime, by a large amount.

Third, keeping the 40-hour standard work week is important. Cost of overtime and the loss in the amount made because of worker fatigue are two reasons already mentioned. Board Foot management also feels the number of workers will have to be increased by 10 percent to keep the present level of making lumber.

The lost cost ($5,200 per year) of the eighth paid holiday makes this a useful exchange item. Note its low satisfaction to management.

Other Information

Board Foot thinks it can bear a strike for about 40 days without long-run damage to its profits or ability to make things. However, management must not forget its contracts to sell lumber to five suppliers. Management also respects the abilities of its employees and realizes that they have helped contribute to the company's past success.

NOTE: Management must respect the abilities of its employees and realize they have contributed to the company's success. Unreasonable settlements will result in lower morale and possible loss of the best employees to competing firms.

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UNIT 4
THE ROLE OF GOVERNMENT IN ECONOMICS

Student Handouts

Handout 4-1-1
Economic Reasoning Quiz

1. Americans are free because we have a constitution.
   A. True
   B. False

2. Government must produce some goods and services because the private sector will not produce them.
   A. True
   B. False

3. Government leaders serve the public interest while business leaders serve only their private interest.
   A. True
   B. False

4. Consumers usually benefit from government regulation of business.
   A. True
   B. False

5. Special interest groups can gain special favors only from corrupt politicians.
   A. True
   B. False

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Handout 4-1-2
Letter to *Capstone* Students

Dear *Capstone* Student:

Government is everywhere

Do you realize that government influences your behavior every day? The mattress you sleep on must meet government specifications for resisting fire. You ride to school on streets provided by government. You take classes from teachers paid by government. You may work at a part-time job which has special, government-required work rules for younger workers. Your payroll check has income and social security taxes taken out before you even see it. You pay state and federal taxes when you buy gas. You get the point: government is everywhere.

Earlier you learned about six rules that guide economic thinking:

1. People economize.
2. All choices involve cost.
3. People respond to incentives in predictable ways.
4. Economic systems influence choices and incentives.
5. Voluntary trade creates wealth.
6. The consequences of choices lie in the future.

Changing the rules can change peoples' behavior in predictable ways

The lessons that follow in Unit 4 will stress two of these ideas. First, economic systems influence individual choices and incentives. You will learn how important it is that government sets the rules of the economic game. By establishing and enforcing these rules, government can have a big impact on the decisions that you and others make in the economy. The impact government can have depends heavily on the second idea stressed in this unit: people respond to incentives. If government leaders change the rules (e.g., approve a large new tax on cars which are gas guzzlers), it can change people's behavior in predictable ways (encourage people to buy more fuel-efficient cars).

The more you know about how government leaders make decisions, the better you can forecast how government decisions may affect you.

Sincerely,

The *Capstone* authors

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Handout 4-2-1
The U.S. Constitution: Its Effect on You

The following are statements by young people who were asked how the U.S. Constitution affected their family or friends. Read the statements which follow and respond to the questions below.

Statements

Hassan, age 16: "My family came to this country because things at home were a mess. My parents never knew what to expect. My father finally closed our shop because police and soldiers just took what they wanted. Finally, the soldiers began to steal things from everyone: on the streets, in homes, in hotels, stores, and offices. The soldiers had become thieves wearing uniforms. My parents decided that things were so uncertain that we should leave."

William, age 17: "I know that I can go about as far as I want in the United States. There are laws to protect people against discrimination because of their color, sex, or religion. The idea is that your individual talents and desire are what count — not who you know or what religion you belong to."

Jerry, age 18: "I know the system isn't perfect. My mom has told me how she thought that she had once been passed over for a job promotion because she was a woman. Nonetheless, I think that this is a system that gives individuals a lot of economic opportunity. I don't think that I'll mind paying taxes if it helps protect economic opportunity for me and my family."

Christine, age 15: "In this country I can move around as I choose. If there is a job for my dad in Los Angeles, we talk about going. We never even think about whether the government would approve the move. People in some other countries do not have that kind of freedom. I can pursue the type of career that I want, wherever I want, without the government telling me what I can or cannot do.

Questions

1. What are your tentative career plans?

2. How do you think that your freedom to make career decisions might be related to the U.S. Constitution?

3. Your family may have immigrated to the U.S. from another country. If your family immigrated here, why did they choose to come?

4. Maybe your family has moved from one community to another. If your family has moved, what were the reasons?

5. How do you think rules in the U.S. Constitution banning discrimination promote the economic well being of individuals?

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Handout 4-3-1
One Nation or Thirteen?

Directions: Read the information below and respond to the questions which follow.

The American people had just fought the American Revolution, a remarkable accomplishment in the eyes of the world. Now, the economic problems facing the new nation had to be solved. To many, the situation seemed bleak.

Debt: After the Revolutionary War, Congress faced huge debts. We owed money to the French, who helped support the war. Money was also owed to American citizens who had previously bought bonds from the government to help support the war effort. The debt problem was so severe that there was serious talk about simply not paying the debts. Some people argued that these bonds had changed hands several times. Congress would not be paying debts to the people who originally helped support the war effort but to speculators who purchased the bonds from them. Other people, however, feared that such drastic action would weaken the confidence of other nations in the new government and severely hurt its economic future.

Power to Tax: The federal government could levy a direct tax only if the money was returned to the states on the basis of population. In other words, the federal government really had no way to collect revenue to pay for its own expenses. Only the states had this power. There was no practical way for Congress to meet its financial obligations.

Currencies: Congress issued currency and coins, but so did several of the states. In fact, foreign currencies from Spain, England, and France were seen by many as more valuable than currency produced by the government under the Articles of Confederation. The situation was very confusing to consumers and very uncertain for business people.

Tariff wars: There were signs that tariff wars would erupt among the states. New York imposed a fee on vessels traveling to and from Connecticut and New Jersey. Not be be outdone, New Jersey imposed its own tax on a New York-owned lighthouse on New Jersey soil. New Jersey, lying between New York City and Philadelphia, found its exports heavily taxed. Leaders in other states watched attentively and considered placing their own taxes on products from neighboring states. After fighting a military war with the British, some leaders now feared a tariff war among the 13 states.

Military weakness: Britain continued to occupy territories in the Great Lakes in open violation of the agreement with the United States in the treaty of Paris that ended the Revolutionary War. This slowed the ability of Americans to begin economic development of the Northwest Territory. The Spanish refused to allow Americans to navigate parts of the Mississippi River. Meanwhile, the Barbary pirates were attacking American shipping in the Mediterranean Sea.

Questions

1. What might have happened if the United States, under the Articles of Confederation, had not paid its debts?

2. What might have happened if no way had been found for the central government to collect taxes?

3. What might have happened if no one currency had been accepted?

4. What might have happened if tariff wars had broken out among the states?

5. What might have happened if the United States had remained a weak military power?

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Handout 4-4-1
Is Government Really Necessary?

Part 1: We Love and Hate It

Americans have a love-hate relationship with government. On the one hand, we often hear people grumbling about government:

"Taxes are too high!"
"Military leaders squander billions of tax dollars on weapons that don't work right."
"Government officials receive fat salaries for pushing paper."

On the other hand, Americans often are very proud of their political system. We tend to think that our government is the best. The long history of our Constitution and the open nature of the political system are sources of pride for many Americans.

Of course, both ideas are present in the minds of many U.S. citizens. It may seem like a contradiction, but we often think that government should perform important tasks in the economy, yet we are fearful that government leaders will become too powerful and pose a threat to individual liberties.

Part 2: Public versus Private Goods

The *public sector* of the economy is all the production and consumption activities of government. One important economic role of the public sector is to produce goods and services. This might surprise you. We usually think of goods and services as being produced by producers in the marketplace or what is often called the *private sector* of the economy. After all, in a market economy, people provide the goods and services for which others are willing to pay.

Nevertheless, private sector suppliers may not produce certain goods and services in sufficient quantities even though large numbers of people may want them. If individuals can obtain a good or service whether they pay for it or not, they have less incentive to pay. Similarly, if producers anticipate that the good or service they produce will be "given away" to non-payers, they have little incentive to produce. That is why the private sector may not produce enough — or even any — of certain goods and services that people want.

Which goods and services have these mysterious characteristics? What are these things that everyone wants even though not enough will be produced? They tend to be goods and services that become available to everyone once they are produced — whether people pay for them or not.

Such goods and services have two, very similar characteristics:

1. *Non-exclusion:* If it is difficult to exclude non-payers from receiving some goods and services, they should probably be produced by government. For example, a street light on a public street benefits all the neighbors as well as those who pass by. It is difficult to exclude non-payers from receiving the benefit even though they do not pay for it.

2. *Shared consumption:* One person's use or consumption of a good or service does not reduce its usefulness to others. For example, national defense tends to benefit everyone.

Of course, some goods and services can be produced both by the public and private sector. While our society may view particular goods or services as fulfilling the tests of non-exclusion and shared consumption, this may not prevent the good or service from being offered by the private sector for consumers who wish to pay. For example, there are private as well as public schools, camping sites, and, in some places, private means for garbage collection.

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Part 3: Classification of Public and Private Goods

The following is a list of goods and services. Practice your understanding of the concepts of non-exclusion and shared consumption and decide whether each item is best classified as one that should be produced by government or one that should be produced by private business. Place an "X" in the correct category, and briefly explain your choice. Be careful. The distinctions are not always neat and easy.

Good or Service	Public/Private/Both	Why?
1. Police		
2. Flood control		
3. Rock concerts		
4. Elementary and secondary education		
5. Court system		
6. College education		
7. Super computers		
8. Parks		
9. Libraries		
10. Movie tickets		

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Handout 4-5-1
What Makes Them Run?

Barbara Birch

Barbara Birch is nearing the end of her second term as a member of the U.S. Congress. She is one of the rising stars of the U.S. House of Representatives. In fact, a prominent writer for the *Washington Post* observed that she is already known as one of the nation's leading authorities on environmental issues.

One recent and typical day for Representative Birch went like this. She was up at 5:30 a.m., and by 6:30 was hosting a working breakfast with officials of the Preserve Our National Parks Association. By 8:00 a.m., she was at her office reading a thick briefing paper prepared by her staff on the economics of reducing land pollution through garbage incineration and recycling. The rest of the day was spent attending two committee meetings, casting three roll call votes on the floor of the House, and eating lunch with high school students from her district who were on a special class visit to Washington D.C. At 7:00 p.m., she gave a speech, "The Environment: Our Nation's Most Valuable Resource," to 500 members of the Save Our Natural Resources Council. The speech was carried nationally on public radio. At the end of her speech, she was given a standing ovation. She had an 8:30 p.m. meeting with her office staff members to discuss tactics for her re-election campaign. She learned of a persistent rumor that a good-looking and highly successful young lawyer was planning to run against her. They also discussed the possibility that she might be named to serve on the powerful Energy and Commerce Committee.

1. What incentives to you think might encourage Representative Birch to run for re-election to Congress?

2. In what ways did she encounter competition in the political process?

3. Do you predict that Representative Birch will seek re-election? Why or why not?

Sam McHenry

Sam McHenry has lived in Morgandale a long time. He began his career 15 years ago working in sales for a large insurance company. Now that he is the midwest divisional sales manager, he travels a lot less than he did when he first started. Being home more started him thinking about taking a more active interest in community affairs.

Sam is thinking about running for Board of Directors of the Morgandale Public Schools. He was raised in a family that stressed the importance of "giving something back" to the community. In fact, his mother served for several years on the city council of the town in which he grew up. Sam and his wife Clara have two children, ages five and seven. Also, Sam understands what it means to pay taxes. After renting an apartment for several years, Sam and his wife bought a home in the school district. They have discussed the recent sharp increases in property taxes.

Sam knows that Mrs. St. Clair, a three-term veteran of the school board, is not planning to run again. He thinks that he has a reasonable chance to win her spot on the Board. However, he heard that Jean Simon, a former school teacher, is thinking about running.

1. What incentives might encourage Sam McHenry to run for school board?

2. In what way has he encountered competition?

3. Do you predict that Sam will run? Why or why not?

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Tom Jackson

Tom Jackson heard the doorbell, rose slowly out of his favorite chair, turned down the volume of the televised NBA play-offs, and answered the front door. There stood Margaret Williams and Al Evinrude, two long-time members of the Jefferson County Democratic Party and Tom's close friends for several years. They wasted no time in telling Tom what they wanted. They had come to persuade him to run for the Second District seat in state legislature.

Tom had suspected that they might ask him. He had established a local reputation as a successful owner of a computer consulting firm. He had been very active in local Democratic Party politics, serving two terms as the Chair of the Jefferson County Democratic Party.

Margaret took the lead in explaining to Tom why he should run. She pointed out that Tom was respected in the community. His ideas seemed to attract new people to the party. During his leadership, for example, officials of the Jefferson County Democratic Party became respected for speaking out on important social concerns. The party had also had several successful fund-raisers under Tom's leadership.

Tom smiled modestly at Margaret's kind words. Then, in a friendly yet firm voice, he reminded her that every Democrat since 1966 had been defeated for the Second District seat. He went on to say: "If I do run and win, I'll have to spend a great deal of time in the state capitol. I'm not so sure that I want to be away from my family that much. Besides, who will run my business while I'm at the capitol? It took me a long time to get this far with the business. I don't want to hurt my family's financial well-being because I like politics."

Al and Margaret said that they understood Tom's concerns, but that he shouldn't decide right away. There was, after all, still time before the summer nominating convention.

1. What might encourage Tom to run?

2. What would discourage Tom from running?

3. What do you predict he will do?

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Handout 4-6-1
What is a Fair Tax?

Part 1: The Criteria

Four criteria are commonly considered in deciding what is a "fair" tax.

1. *Ability to pay*: A tax should equally tax individuals with equal ability to pay. People with different amounts of wealth or income should pay different amounts of taxes. A *proportional* tax (sometimes call a flat rate tax) takes the same percentage of income or wealth from all taxpayers. A *progressive* tax means that those with higher incomes or those who are wealthier pay a higher proportion of their income in taxes. A *regressive* tax means that poor people pay a higher proportion of their income in taxes than those with higher incomes or those who are wealthier. Income tax policy in the U.S. has generally reflected the idea that a progressive tax is the most fair. However, interest in proportional taxation has increased.

2. *Efficiency*: A fair tax should not inhibit productive activities. A tax should not discourage people from working or from investing in new businesses. It should not encourage individuals to be wasteful in buying goods because of their tax benefits rather than because of their value. A tax should not favor less productive businesses over more productive ones.

3. *Simplicity*: The government tends to rely on individuals and businesses to report their incomes accurately and honestly. For example, a frequent complaint about the federal income tax, especially around April 15 when taxes are due, is that the system is very complex. Increased complexity encourages people to make mistakes, promotes cheating, and builds resentment. Another example comes from residential property taxes. To figure a property tax, a government official must decide the value of a person's home. Formulas for assessing values vary widely and may or may not reflect the market value. This system can be very confusing to taxpayers.

4. *Benefits received*: Individuals should be taxed according to the benefits they receive from government services. Those who receive numerous benefits should pay more than those who receive few. For example, in some states, revenues generated from gasoline taxes are used to maintain and improve roads. Therefore, people who drive more pay more tax to support highways.

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Part 2: Apply the Criteria

Directions: Analyze each type of government tax or fee listed below. If the tax seems to meet a criterion, give it a plus (+); if it does not meet a criterion, give it a minus (−); if a criterion does not apply in one way or the other, give the tax a zero (0) in connection with that criterion.

	Criteria			
Tax/Fee	Ability to Pay	Efficient	Simple	Benefits Received
1. Driver's license fee (A fixed amount for each driver.)				
2. Personal income tax (A percentage of each person's taxable income.)				
3. Social Security tax (A percentage of wages and salaries up to a limit.)				
4. Sales tax (A percentage of the pre-tax retail price of covered products.)				
5. Property tax (A percentage of the property's value.)				

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Handout 4-7-1
The National Commission of Taxation Makes Its Annual Forecasts

Welcome to the NCT

You have just been appointed by the President of the United States to the National Commission of Taxation (NCT). The purpose of the NCT is to forecast how changes in tax laws might change individual behavior. Every year, the NCT presents its forecasts to members of Congress and to the President for their consideration. And, every year, people are amazed at how well the NCT is able to predict changes in people's behavior.

Background for NCT Members

There is a simple rule that guides the work of NCT members. They understand that taxes are incentives. Changing the types of taxes levied and tax levels can influence people's behavior. Sometimes government deliberately raises or lowers taxes on particular goods and services to encourage or discourage certain types of behavior. For example, the first internal tax levied by the federal government was a tax on distilled spirits produced in the U.S. This tax was justified not only as source of revenue but also as a way to discourage use of alcohol. At other times, government leaders are not very certain about how changes in tax laws might change people's behavior. Poor tax laws often result in unintended consequences.

A second rule is that there are substitutes for everything. If, for example, government makes one type of activity more expensive by increasing the tax on it, people often make substitutions. Applying this understanding has helped the NCT to predict actions that other government leaders had not considered.

Your Job

Your job is to read each of the following situations and forecast how people's behavior might change. Try to form your response so that you identify what people might substitute in each case.

Situation #1 The U.S. increases the income tax by 25 percent for all income groups. How might individuals respond?

Situation #2 Your state raises the fee for a driver's license to $500 per person. How might individuals respond?

Situation #3 Complaints are increasing every year about tourist overcrowding in the U.S. National Parks. The federal government increases the national park camping fee to $25. How might individuals respond?

Situation #4 Freeways are very busy and slow during morning and evening rush hours. The state government decides to make the freeways "tollways" during the peak hours from 7:00 a.m. until 8:30 a.m. and from 4:00 p.m. until 5:30 p.m. by imposing a $3.50 fee per car at each entrance ramp along the most-traveled 10 mile stretch of freeway. How might individuals respond?

Situation #5 The federal government, in order to reduce the federal deficit, no longer allows homeowners to deduct home mortgage interest from their taxable income. How might individuals respond?

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Handout 4-8-1
The Economics of Special Interests

Part 1: Who Will Catch the Muskies?

The citizens of the U.S. city of Twin Lakes (population of 2 million) have been big supporters of professional baseball for several years. The home opener of their team, the Muskies, always sets the attendance record for the major leagues. Lately, it has become very clear that there are problems in keeping the Muskies in Twin Lakes. City Stadium, the "Home of the Muskies," is getting old. Parking is inadequate and the stadium, a great baseball stadium for over 30 years, now seems dingy and cramped. It has also become expensive to operate. Sensing some dissatisfaction, leaders in three other cities with modern stadiums are asking the owners of the Muskies to look at their modern stadium facilities as a possible future home.

Numerous special interests in Twin Lakes are deeply concerned. Labor and business groups are distressed about the potential loss of jobs if the Muskies were to move. For example, hotel and restaurant owners and their employee unions depend heavily on income generated by the Muskies. Local government leaders are worried about the loss of tax revenue if the team leaves; they are also worried about being left with a "dinosaur" stadium. The fan organization, the Musky Mongers, is obviously worried because one of its favorite pastimes is being threatened. One fan was overheard saying, "If the Muskies move, I'm moving with them!"

All the interest groups have worked out a plan with the city, county, and state government leaders. Their idea is to build a new stadium on land originally intended for an industrial park. The new stadium will cost $150 million. Groups representing business, labor, and fans all back the new stadium idea. They have tentative commitments for local and state government funding totaling $135 million.

On April 5, the date of the home opener, all the interest groups (business, labor, fans, state and local governments) invited the state's fourteen members of the U.S. House of Representatives and its two U.S. Senators to lobby for $15 million in federal funds to allow them to gather all the funds needed to complete the new stadium.

1. Who will benefit from the construction of the new stadium? Why?

2. Will people in other states and communities derive much benefit from the construction of the new stadium? Why or why not?

3. If you knew that your taxes would increase by a few cents so the people in Twin Lakes could have a stadium, would you protest the action to your members of Congress? Why or why not?

4. What do you predict will happen in this situation? (Think about who benefits, who pays, and the incentives to the members of Congress from the state.)

Part 2:

A. The people in Los Angeles want federal funding to help pay for a modern subway system.

   1. Who will benefit from the construction of the new subway?

   2. Will people in other states and communities derive much benefit?

   3. What do you predict will happen?

B. The people in Townsend, Wisconsin (population about 500) want a new federal dam and reservoir constructed.

   Who will benefit from the construction of the new dam and reservoir?

   What do you predict will happen? (Think about who benefits, who pays, and the incentives to the members of Congress from the state.)

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Handout 4-11-1
Why Markets Fail: Burn On, Big River

The Cuyahoga River, which flows from Akron to Cleveland and into Lake Erie, has the distinction of being the first river to be so polluted that it burned. The city of Akron dumped raw sewage into the river, and the people of Cleveland, who were downstream, smelled the results. Factories lowered their costs by using the river as an open sewer. Toxic waste dumps were on the river's edge. Lake Erie became the world's largest dead lake. Only a foolish fish would wander through Lake Erie and into the Cuyahoga River. This situation inspired songwriter Randy Newman to pen:

Burn on, big river, burn on
Burn on, big river, burn on
Now the Lord can make you tumble
And the Lord can make you turn
And the Lord can make you overflow
But the Lord can't make you burn.
© 1970, January Music Corp., a division of A. Schroeder International Ltd.

The fire on the Cuyahoga prompted the citizens of northern Ohio and the federal government to take action to clean up the river and the lake. The federal government helped pay for a modern sewage treatment plant in Akron. By helping pay for a sewage plant, government acted as a provider of services. Factories were ordered to clean their waste water. Some closed or moved away. This is an example of government regulating private-enterprise activities. The federal government purchased much of the land between Akron and Cleveland and declared it the Cuyahoga Valley National Recreation Area.

The rebirth of the river and lake spawned both fish and new businesses. The Flats along the river became a popular place to visit. Restaurants sprang up on the river shore and buildings were restored. Where the river meets the lake, there was a mile-long boardwalk lined with restaurants, discos, and shops. These new service industries created thousands of jobs. Some adventurous fish even wandered upstream.

Externalities: How Actions Affect Others

The Cuyahoga River case study illustrates what economists call external effects. *External effects* occur when one person or a group does something that affects other people without the usual costs or payments.

A *negative externality* harms others. The people of Akron saved money by dumping raw sewage into the river. Did they ever create negative externalities for the people of Cleveland! Factories saved costs and consumers paid lower prices because factory waste was dumped into the river. However, people who wanted to use the river for recreation paid for some of these costs. Cities downstream on the river had to pay part of these costs when they purified the water for drinking.

Cleaning up the river created *positive externalities*. The new restaurants and shops were the positive externalities of the clean-up. A positive externality benefits other people.

Another example of a positive externality is education. Education helps not only the people being educated; it also helps all of us. An educated person can more easily get a job and has less chance of having to be supported by government. Educated people commit fewer crimes and have lower medical expenses. Government sometimes *subsidizes*, or provides aid, for actions that create positive externalities. This is why government supports public schools.

Paying for Externalities

Markets fail when negative and positive externalities exist and neither party pays for all the costs or all the benefits. The polluting factories and their customers didn't pay for all the costs of making the products. The restaurants and shops and their customers benefited when the Cuyahoga River was cleaned up.

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Government, as a regulator, can force businesses and their customers to pay all the costs of production by taxing pollution or demanding that waste be cleaned. However, the actions of government designed to clean up the environment have costs. We will see later that in the name of a cleaner environment, government has pursued some costly programs which have not even been effective.

1. What are externalities?

2. Name at least 2 activities that involve negative externalities.
   Name at least 2 activities that involve positive externalities.

3. Why may government choose to take actions when market decisions involve externalities?

4. Many citizens believe that education has positive externalities. Explain why this is so.

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Handout 4-11-2
The First Law of Garbage

The first law of garbage is that everyone wants you to pick it up and nobody wants you to put it down. An example of this law in action was the 1988 trip by the New York garbage barge, which wandered down the East Coast in search of a place to dump its contents. No place was willing to accept the garbage, so the barge returned, fully loaded, to New York.

The U.S. produces twice as much garbage per person as any other country in the world. We put 80% of it in landfills and recycle less than 10% of it. Japan, for example, recycles twice as much garbage as we do.

Here are two plans for recycling garbage. Which do you think will be more effective? Why?

Plan A

Order all communities to submit plans to set aside 25% of their household and commercial trash for separate pick-up and recycling. Paper, glass, and metal must be separated from other garbage. Communities that fail to comply with this law will be heavily fined by the state.

Plan B

Provide free pick-up of containers with cans, bottles, newspapers, and junk mail that can be recycled. Citizens, however, must pay $20 a month to have one can of ordinary garbage picked up each week. Citizens must pay $15 for each additional can picked up during the month.

1. How do the incentives in Plan A differ from the incentives in Plan B?

2. Which plan do you think will work better? Why?

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Handout 4-11-3
Is There a Better Way to Clean Up the Environment?

During the 1970s and 1980s, the U.S. made great progress in cleaning up the environment. Compared to the 1970s, particulates in the air are down 64%, carbon monoxide is down 38%, and sulfur oxides are down 25%. Progress on water pollution is even better. Dumping of industrial waste into the oceans is down 94%, the number of communities without adequate sewage treatment is down 80%, and the miles of rivers unfit for swimming are down 44%. (*Fortune*, 1988)

Still, most economists are unhappy about the clean-up. They believe it has been too costly and some methods have been ineffective. Let's see why economists think we can do better at a lower cost.

First, economists think of pollution control as an economic good while others think of it as a moral problem. Environmentalists view polluters as bad people. They think living in a clean environment is a human right to which every American is entitled.

Environmentalists believe that pollution control can't be reduced to a dollars and cents proposition. As David Doniger, a lawyer for the National Resources Defense Council, put is, "We take the view that there are rights involved here, rights to be protected from threats to your health, regardless of the cost involved." (Blinder, 1987)

Most Americans side with the environmentalists. In one survey, 53% of those asked agreed that "protecting the environment is so important that requirements and standards cannot be too high, and continuing improvements must be made regardless of cost." (3)

All Choices Involve Costs

The economists' view is not as dramatic as the environmentalists' view. First, economists do not think polluters are evil. They think of polluters as people who are weighing costs and benefits. By using the air and water as a free dump, polluters reduce their costs. This improves their profits and lowers the prices of their products. Consumers who buy these products also benefit. The problem is that others who are not part of the market transaction pay part of the costs of these decisions. These costs are called *negative externalities*. The water is less enjoyable for recreation and must be purified for drinking. People breathing polluted air have higher medical bills. The way to clean up the air and water is to force polluters to pay these costs. Then they won't use the air and water as a free good. This is called *internalizing the externality*.

A World of Trade-Offs, Not Solutions

Economists deal with pollution as a "more or less problem," not as a "yes or no" problem. Clearly, there are great benefits to clean air and water. Public opinion polls constantly show that Americans want a cleaner environment. But like any other economic good, there are opportunity costs involved in cleaning up the environment. Money spent on pollution prevention and control can't be spent on housing, health care, education, or recreational facilities. The environment would be much cleaner if we had no cars or if we closed all our factories. Would you favor a cleaner environment if the cost were 30,000,000 more people unemployed? Obviously, pollution control, like any other good, has costs and benefits. The question is how to clean up the environment at an acceptable cost. Because resources are scarce and wants unlimited, we must search for the most efficient way to do so. If there is a way to achieve a purer environment and pay less for it, we'd better take it.

Emissions Taxes vs. Direct Controls

Direct controls have been the government's main tool to clean up air and water. The federal government decides how much pollution will be allowed, and everyone must meet those standards. For example, there are standards setting limits on auto emissions.

Why don't economists like the current system of direct controls? Although it may seem fair for everyone to achieve the same standard, it is easier for some businesses to comply with these regulations than it is for others. Let's say the federal government requires that sulfur emissions be reduced by 25%. While one company may be able to do this cheaply, another may find the standard impossible to achieve and might go out of business. While the first company has no incentive to reduce emissions more than 25%, the second may work hard to get an exemption. The Environmental Protection Agency, not wanting to be blamed for unemployment, may grant the exemption. Furthermore, direct controls are effective only if the courts convict violators and if the penalties are severe. Pollution will be lowered only if the cost of additional pollution is less than the benefits.

Taxing sulfur emissions creates a different set of incentives. All companies will see that it is in their interest to reduce these emissions as long as the cost of the clean-up is less than the tax. The first company may reduce its sulfur emissions by 90% rather than by 25%.

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Our second company may reduce sulfur emissions by only 10% and pay the tax on the rest. The government doesn't have to grant an exemption for the second company. The government just checks the emissions and collects the tax.

Alan Blinder sums up the case for an economic approach to the environment this way:

> A very conservative estimate ... is that the nationwide costs for pollution abatement would be reduced by one-third with no increase in pollution. Larger savings are likely. In fact one expert has speculated that cost savings might run as high as 80 percent once the profit motive had led to cheaper pollution-control technologies. Since the nation now spends more than *$70 billion* per year on reducing pollution, the potential savings are perhaps $23 billion per year — and could run as high as $50 billion. That sum ought to be enough to get someone's attention. (Blinder, 1987)

Economics vs. Politics

Why then is the economists' solution not adopted? The reason is another kind of failure — government failure. One group that benefits from the current system is the bureaucrats who enforce the regulations. Monitoring and taxing pollution are much easier than enforcing the complex technical regulations that now exist. Switching to taxation would mean less work for bureaucrats. In a competitive market economy, a business goes under if it is inefficient. Unfortunately, in government there are no market incentives for greater efficiency unless the voters demand it. As we have seen, the voters support cleaning up the environment regardless of the cost.

Surprisingly, many businesses also favor the current system. Stiff regulations mean nothing if they are not enforced, and many rules are not enforced. A tax is more likely to be enforced. Businesses may fear the tax collector more than the police officer.

Economists have not yet persuaded the public that there is a better way to clean up the environment. We can have a cleaner environment at a lower cost by changing incentives. The cost of ignorance is high.

1. How does the economists' view of pollution differ from the environmentalists' view?

2. According to economists, why does pollution occur? How can pollution be reduced? What are some costs of pollution?

3. Why do economists believe that taxing pollution is more effective than setting pollution standards and controls? Use the ideas in the *Handy Dandy Guide* in answering this question.

4. If economists are correct in thinking that we can have cleaner air and water at a lower cost, why don't we do it?

5. Are the ideas in the following quotation true, false, or uncertain? Why?

   "Pollution is a worldwide problem. All nations should take steps to eliminate air and water pollution immediately. Failure to do so should be considered a crime against humanity, a violation of a basic human right to breathe clean air and drink pure water."

Sources

Fortune Here Comes the Big New Cleanup. Nov. 21, 1988, p. 102.

Blinder, A.S. *Hard Heads, Soft Hearts*. Reading, MA: Addison Wesley Publishing Company, 1987.

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UNIT 5
MACROECONOMICS

Student Handouts

Handout 5-1-1
Economic Reasoning Quiz

1. There is little agreement among economists on how to control the economy.
   A. True
   B. False

2. The number of people employed and the number of people unemployed can rise at the same time.
   A. True
   B. False

3. The higher the real Gross National Product, the better off all the people of the country are.
   A. True
   B. False

4. All people would be better off if they just had more money.
   A. True
   B. False

5. Inflation hurts almost everyone.
   A. True
   B. False

6. Economic history shows that the cost of lowering inflation is a higher unemployment rate.
   A. True
   B. False

7. One of the best ways to lower inflation is to impose mandatory wage and price controls.
   A. True
   B. False

8. The Federal Reserve Board of Governors has more influence over the economy than Congress does.
   A. True
   B. False

9. We would have fewer economic problems if the federal government were required to balance the budget.
   A. True
   B. False

10. Luckily, economies as large as that of the U.S. need not worry about the effects of political and economic events occurring elsewhere in the world.
    A. True
    B. False

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Handout 5-1-2
Letter to *Capstone* Students

Dear *Capstone* Student:

Working Together

By now you are well aware of how individual people think about and make economic choices. Economists call the study of individual choices *microeconomics*. It is comforting to know that economizing provides rules for us to follow, and that most of us follow those rules because it is in our best interest to do so. But, you are probably not aware of how all the individuals in a country interact so as to create a national economy. It is now time to learn about that topic — how the economy as a whole functions. The branch of economics concerned with the economy as a whole is called *macroeconomics*.

People Have Goals for Economic Systems

As people have goals for their lives, so they have goals for their economies. Economic systems, after all, are established by people to accomplish whatever they believe is important. Sometimes, the goals relate to military might, sometimes to the sharing of wealth or social security, sometimes to the achievement of economic efficiency. In this sense, U.S. citizens have goals for their economy. These goals include economic growth, price stability, a high level of employment, and environmental protection.

Remember that these goals are chosen by individuals. We express our goal preferences in several ways — e.g., through decisions we make as consumers, as producers, and as voters in local and national elections. It is our responsibility to reassess these goals from time to time. Knowing our economic goals permits us to evaluate our economic system's success or failure.

Measuring the Economy

A logical question at this point may be, "How do I carry out my responsibility of evaluating and helping to change the economy? After all, isn't it a fact that a person needs a great deal more knowledge than I have to 'grade' the economy?" NO! WRONG! It is everyone's responsibility to see to it that the economy is doing its job. In fact, if you have been paying attention so far in this economics class, you have a much higher level of economics understanding than the average citizen!

Happily, numerous devices are available to help show how the economy is doing. Such statistics as measurements of the Gross National Product, consumer price indexes, employment levels, and unemployment rates provide insights about the economy that help us meet our monitoring responsibilities.

And What If We Give the Economy a Bad Grade?

If the economy is failing or not doing as well as expected, things can be done to promote change. For example, spending by individuals, business, and governments is a powerful influence on the economy. The federal government's fiscal policy — its expenditures and its taxation — have a powerful influence on the economy's total spending. Another important influence on spending is monetary policy, which is controlled by the Federal Reserve system. Both policies working individually or in combination have the power to change the amount and direction of economic activity in the country.

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Other Factors Influence the Economy As Well

Finally, we recommend that you enter this unit with your eyes wide open. The study of macroeconomics is not easy. Frankly, even economists are still learning about the subject. In addition, remember that we live in a growing world economy and that the actions of foreigners also influence the operations of the U.S. economy. We are not insulated from others and they are not insulated from us. Despite all the national and international influences that affect the U.S. economy, the influences make a difference only insofar as they affect individual choices. Individual choice always matters in economics.

If you start to get confused, remember your *Handy Dandy Guide* to economic understanding. It also works for macroeconomics.

Sincerely,

The *Capstone* authors

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Handout 5-2-1
Measuring the Economy

GROSS NATIONAL PRODUCT (GNP)

The dollar value at market prices of all final goods and services produced in an economy during a stated time period.

Example: Output of final goods - value $27,000.00
Output of final services - value $43,908.00
Value of GNP $70,908.00

UNEMPLOYMENT RATE

The percentage of the total labor force that wishes to work but cannot find a job.

Example:

$$\frac{\text{Unemployed}}{\text{Total labor force}} \times 100 = \text{Unemployment rate}$$

Unemployed = 15
Total labor force = 100

$$\frac{15}{100} \times 100 = 15\%$$

EMPLOYMENT RATE

The percentage of the total population (civilians 16 years of age or older) who are working.

Example:

$$\frac{\text{Employed}}{\text{Total labor force}} \times 100 = \text{Employment rate}$$

Employed = 375
Total labor force = 500

$$\frac{375}{500} \times 100 = 75\%$$

CONSUMER PRICE INDEX

A measure of the price changes in a specific group of goods and services over a stated period of time in relation to a base year.

Example:

$$\frac{\text{Current costs}}{\text{Base costs}} \times 100 = \text{Consumer Price Index}$$

Current costs = $530
Base costs = $480

$$\frac{\$530}{\$480} \times 100 = 110.4$$

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REAL GROSS NATIONAL PRODUCT

The dollar value of all final goods and services produced in an economy during a specified time period adjusted for inflation.

Example: $\frac{\text{GNP for time period}}{\text{Consumer Price Index (CPI) for time period X 100}}$

GNP = $125,000.00 $\quad\quad$ $\frac{\$125{,}000.00}{125}$ = $100,000.00 Real GNP

CPI = 125

Questions

1. Under what condition would a GNP rise of 10 percent diminish an individual's standard of living?

2. Is it possible to have the unemployment rate and the employment rate both rise at the same time?

3. Where would you like to live and work? In Community A earning $15,000.00 with a CPI of 125 or in Community B earning $25,000.00 with a CPI of 225? Explain.

4. How much money would you have to earn in each community mentioned in question 3 in the base year to have the same purchasing power as you have today?

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Handout 5-2-2
Using Economic Data

Directions: Answer the questions that follow, using the data provided.

1. Circle the economy that you think has experienced the highest level of production.

Economy A	**Economy B**	**Economy C**	**Economy D**
GNP	GNP	GNP	GNP
$125,000	$124,567	$127,908	$135,789

2. Using the information provided in question 1, circle the country with the highest level of production when the following information is considered.

Economy A	**Economy B**	**Economy C**	**Economy D**
Price rise	Price rise	Price rise	Price rise
10%	7%	14%	18%

3. As a graduating senior wanting to enter the labor force, in which economy would you want to look for a job when the following information is considered? Circle it.

Economy A	**Economy B**	**Economy C**	**Economy D**
Unemployment	Unemployment	Unemployment	Unemployment
6%	9%	13%	5.4%

4. How is it possible to have an increasing unemployment rate and an increasing number of employed people simultaneously?

5. Which economy has the possibility of providing all its people with the highest standard of living? Circle it.

Economy A	**Economy B**	**Economy C**	**Economy D**	**Economy E**
GNP	GNP	GNP	GNP	GNP
$125,000	$450,000	$25,000	$750,000	$500,000
Population	Population	Population	Population	Population
100	500	1	1000	15,000

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Handout 5-3-1
Economic Ups and Downs

1. *Up:* Reflections of Hyojong Kim, age 40, Seoul, South Korea, 1980s

The economy was starting to boom! People who had been unemployed now had the opportunity to choose between available jobs. Some of these jobs related directly to sections of the economy in which the government was spending more money, but many seemed to have little or no connection to the government programs.

People just seemed to be more upbeat and were willing to look to the future with optimism. This optimism translated into higher consumer spending and greater investment on the part of business and industry. I began to see more new automobiles in my neighbors' driveways — not to mention the new bicycles, clothes, TV sets, and even new houses.

A real advantage of the upswing was the re-opening of the furniture manufacturing factory on the other side of Seoul. For years the plant had been shut down, and it always seemed to be such a waste not to have the machinery running and making things.

As the economy seemed to get better and better, my situation also improved. After most of the unemployed people were put back to work, wages began to rise. In fact, some of the companies in town were bidding for people to come to work for them. That's why my wages went up. I always wondered, however, how much better off I was, because prices seemed to climb as fast as my wages, or faster.

2. *Down:* Michael Harris, age 70, New York, New York, 1930s

I can still remember my father coming home that sad day and announcing with tears in his eyes that he was unemployed. It wasn't because he did anything wrong, he explained, it was just that inventories were accumulating and nobody seemed to want to buy what the company he worked for made. It was shocking to me that what my dad helped produce was no longer wanted. It was more shocking when my father told us how we must adjust to the situation. No more money to go to the movies. New clothes and the new automobile we ordered last month were no longer possible. Even the money we spent on groceries was to be cut as much as we could. I often wondered if the owner of the grocery store thought we were mad at him because we stopped buying very much from him.

Our family's problem became a little easier for me to accept as I heard that more and more of my friends' fathers and mothers were out of work. I guess there is some truth in the saying that misery loves company.

I can remember hearing on the radio that the country's economy was at its lowest level in five years. Numerous businesses had shut down, and the productive resources within them were lying idle. On the bright side, prices fell somewhat. I could buy a candy bar for one-third less than I could just four short months earlier. I could buy if I had the money, that is — and of course I didn't.

Things got almost unbearable: our savings were spent, many items in the house were in need of repair, my clothes were worn, and we could no longer pay the mortgage on the house. I remember my dad coming into my bedroom one night just before I fell asleep. He said, "Remember, this too will pass."

Questions

1. In which of these two periods would you prefer to live? Why?

2. What economic conditions exist during times of expansion?

3. What economic conditions exist during times of contraction?

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4. Identify the items listed below as leading expansion or leading contraction.

   a. Production workers' work day increases from 8 to 10 hours. _____

   b. The number of building permits requested at the city building inspector's office increases. _____

   c. Fewer new businesses are started. _____

   d. The stock market average declines. _____

   e. The unemployment rate increases. _____

   f. The unemployment rates decreases. _____

   g. Requests for business loans increase. _____

   h. People are unemployed for shorter periods of time. _____

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Handout 5-4-1
Cast Your Vote

Assume you are a member of Congress. A member of your staff has just given you the following statistics on the economy.

	Year Ago Quarter	Last Quarter	Estimate for Quarter Now Ending
Real Gross National Product (annual rate in billions of 1982 dollars)	$1,475	$1,395	$1,375
Consumer Price Index	195	201	203
Unemployment rate	7%	10.5%	10.5%
Gross private investment (in billions of 1982 dollars)	$217	$195	$160

1. What economic problem is the nation facing? _____

2. What broad social goals are you most interested in achieving? _____

3. What fiscal policy measures might be appropriate to achieve these goals? _____

4. What exact fiscal policy measures would you recommend? Why? _____

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Handout 5-4-2
Cast Your Vote (Again)

Name _____ Class _____

Assume you are a member of Congress. A member of your staff has just given you the following statistics on the economy.

	Year Ago Quarter	Last Quarter	Estimate for Quarter Now Ending
Real Gross National Product (annual rate in billions of 1982 dollars)	$1,485	$1,534	$1,550
Consumer Price Index	220	250	300
Unemployment rate	9%	7%	6.5%
Gross private investment (in billions of 1982 dollars)	$194	$218	$228

1. What economic problem is the nation facing? _____

2. What broad social goals are you most interested in achieving? _____

3. What fiscal policy measures might be appropriate to achieve these goals? _____

4. What exact fiscal policy measures would you recommend? Why? _____

Handout 5-4-3
The Federal Reserve System and Monetary Policy

The amount of money in an economy is important because it affects the level of spending in a country. Too much spending can cause inflation while too little spending can cause unemployment and declining levels of production. In the United States, Congress has assigned the responsibility for controlling our money supply to the Federal Reserve System.

The Federal Reserve System or "Fed" has functioned as the central bank of the United States since 1913. It consists of a seven-member Board of Governors in Washington, D.C., plus twelve regional banks throughout the country. The Federal Reserve System is designed to be as nonpolitical as possible.

As a central bank, the Fed manages the money supply by influencing the lending activity of commercial banks and other financial institutions. But the major part of its direct influence comes about through its relations and dealings with commercial banks, from which the effects spill over to the financial system as a whole.

The deliberate actions of the Federal Reserve System to expand or contract the money supply are called monetary policy. The purpose of monetary policy is to maintain economic output, employment, and prices at desired levels. The Board of Governors and the twelve heads of the regional reserve banks regularly meet eight times a year to decide on Federal Reserve monetary policy. A policy of the Fed designed to expand the growth of money and credit in the economy is known as an expansionary (or loose) monetary policy. A policy to restrict the growth of money and credit in the economy is known as a contractionary (or tight) monetary policy. The creation of too much money can cause inflation, and the creation of too little money can cause recession.

The Fed has three primary tools with which to carry out monetary policy. These are open market operations, reserve requirements, and the discount rate.

Open market operations refer to the Fed's buying and selling of U.S. governnment securities in order to add to or subtract from the reserves of the nation's commercial banking system. Government securities, such as U.S. Treasury bills, notes, and bonds, are issued by the U.S. Treasury in return for money borrowed from individuals and businesses in order to finance government spending. If the Federal Reserve wants to put money into the economy, it buys some of these government securities by writing a check on itself. If, for instance, the Fed buys $10,000 worth of government securities with such a check, it creates the $10,000 used to pay for them. The sellers are not $10,000 richer, since they no longer own the securities, but the money supply grows because there is $10,000 of new money in the economy. If the Fed wants to pursue a contractionary monetary policy, it sells some of the government securities it owns. The money that is paid to the Federal Reserve for the securities is removed from the economy, so the money supply shrinks. Open market operations is the most frequently used tool of monetary policy.

A second important tool of monetary policy consists of **reserve requirements** for bank deposits. The Federal Reserve requires that banks keep as reserves a certain fraction of the deposits they hold. These reserves must be kept as balances at Federal Reserve banks or as cash the banks have on hand (i.e., vault cash). Banks that fail to meet their reserve requirements are subject to penalties. These required reserves cannot be lent to borrowers.

If the Fed wants to pursue a contractionary monetary policy, it can raise reserve requirements, thereby restricting the amount of funds banks can lend. If the Fed wants to pursue an expansionary monetary policy, it can lower reserve requirements. Let's say you deposit $10,000 at your local bank and the reserve requirement on deposits is 15 percent. This means that your bank would have to keep $1,500 on reserve at the Fed (.15 x $10,000 = $1,500). It could create new deposits by lending the other $8,500 to borrowers. If the Fed were to lower its reserve requirement to 10 percent, then the bank could lend $500 more, or a total of $9,000. Such an expansion of bank lending causes the amount of money in the economy to increase. However, if the Fed were to raise its reserve requirements to 20 percent, the bank could lend only $8,000 of the $10,000, thus curbing the possible increase in the amount of money. Changes in reserve requirements can be a very powerful tool of monetary policy but this tool is used infrequently precisely because it is so powerful. Most often, the Fed desires to make gradual or minor changes in policy, aims for which changes in reserve requirements are not suitable.

The **discount rate**, the third tool of monetary policy, is the interest rate the Federal Reserve charges banks that borrow money. If a bank borrows from the Federal Reserve, the reserves lent to the bank are created by the Fed. This process increases the amount of money and credit in the economy. The Federal Reserve does not automatically allow a bank to borrow from it whenever the bank wants to. The Fed can refuse to make such a loan. If the discount rate is low and the Fed does not discourage banks from borrowing from it, the Federal Reserve will foster an expansionary monetary policy. If the discount rate is high and the Fed discourages banks from borrowing from it, the Federal Reserve will foster a tight monetary policy. The discount rate is probably the least strong of the three principal tools of monetary policy, but the Federal Reserve uses changes in it to indicate an overall tightening or loosening of monetary policy.

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Questions:

a. Describe the organization of the Federal Reserve System. _____

b. What is monetary policy? _____

c. In the table below indicate how the Federal Reserve would use each of the three monetary policy tools to pursue an expansionary policy and a contractionary policy.

Monetary Tool	Expansionary Policy	Contractionary Policy
Open market operations		
Discount rate		
Reserve requirements		

d. What kind of monetary policy would the Federal Reserve probably follow if the country had an annual inflation rate of 15 percent? _____ Why? _____

e. What kind of monetary policy would the Federal Reserve probably follow if the country was in a severe recession with high unemployment and falling prices? _____ Why? _

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Handout 5-5-1
Macro-Mysteries

Listen carefully to the description of the Macro-mystery selected and read by your teacher. It is your task to review and analyze the mystery using the economic way of thinking. By doing so, what was once a mystery should become understandable behavior. To assist in your analysis, fill out the section below for the mystery you are given.

MYSTERY _____

Brief description of the mystery:

Describe the types of people involved:

What do the people involved in the mystery value?

State the incentives present for all the people involved.

List the alternative courses of action available to the people involved.

What costs would be incurred by the involved parties if they were to behave in a manner different from that described in the mystery?

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Questions:

a. Describe the organization of the Federal Reserve System. _____

b. What is monetary policy? _____

c. In the table below indicate how the Federal Reserve would use each of the three monetary policy tools to pursue an expansionary policy and a contractionary policy.

Monetary Tool	Expansionary Policy	Contractionary Policy
Open market operations		
Discount rate		
Reserve requirements		

d. What kind of monetary policy would the Federal Reserve probably follow if the country had an annual inflation rate of 15 percent? _____ Why? _____

e. What kind of monetary policy would the Federal Reserve probably follow if the country was in a severe recession with high unemployment and falling prices? _____ Why? _

UNIT 6
FORECASTING OUR ECONOMIC FUTURE

Student Handouts

Handout 6-1-1
Economic Reasoning Quiz

1. Economic theory is not very useful because human behavior is not predictable.
   A. True
   B. False

2. To be useful, economic theories must simplify reality.
   A. True
   B. False

3. Forecasting models should be judged by the number of real world variables included in them.
   A. True
   B. False

4. Economic models have little usefulness in forecasting the economic future.
   A. True
   B. False

5. Some nations have a per-capita gross national product which is less than one percent of the U.S. per-capita GNP.
   A. True
   B. False

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Handout 6-1-2
Letter to *Capstone* Students

Dear *Capstone* Student:

A Forecasting Model

It is time to put our economic puzzle together and make a prediction regarding the U.S. economy's future. You have studied most of the parts to the puzzle already. You realize how individuals economize and how important economizing is. Individuals, when viewed as a large group making choices, represent the economy. Their collective decisions direct resources into productive activities and thereby create jobs and make goods and services available to the market. A simple measure of all the buying decisions of people in the economy is C + I + G + (X) = GNP. This equation means that all personal consumption (C) plus business investment (I), plus all government purchases (G), plus all export sales minus import purchases (X), equals the nation's Gross National Product. The GNP is a measure of the total output of the nation in a year. This economist's tool will become well known to you in the next few days. It not only describes the economy; it also expresses the relationships that exist among key components of the economy. Happily, this same equation becomes a key component of our forecasting tools.

C + I + G + (X) = GNP

Economic Growth Improves Our Quality of Life

As time goes on, successful economies grow and allow most people to earn more income. The U.S. economy has grown at a rate that has allowed real income (income adjusted for inflation) per person today to be seven times the level it was in 1870. This rise has improved our quality of life a great deal and created many millions of new jobs.

As population increases, the need for production growth also increases, so that you and others may get a job upon completion of your schooling.

Economic Growth: A Bumpy Road

Economic growth does not come easily, nor is it guaranteed. Some economies experience high growth rates. Japan's real output has grown at a 3.8 percent rate per year for more than 100 years, while other countries have grown more moderately. For example, the United Kingdom's growth rate for the same period was 1.8 percent per year. Per capita gross national product figures demonstrate even more vividly the different growth rates different economies have experienced. In 1986, Ethiopia had a gross national product per person equivalent to 110 U.S. dollars. Italy's GNP per capita is $6,420, while the U.S. figure is $15,390. Most of the benefits of production are not spread evenly across the population, so average income figures may not provide much insight as to how average individuals live.

Forecasting the Future

The study of economics will help you determine what causes an economy to grow, create jobs, and help people earn an acceptable wage. Your study of macroeconomics (how the economy as a whole behaves) will allow you to forecast the future as economists do. Economists forecast the future because it is an interesting thing to do, because it helps forecasters to influence important decisions, and because other people are willing and able to pay for the information the forecasts provide.

Your economic forecasts may help give you a glimpse of your future. If you forecast a growing economy and you turn out to be correct, chances are you will earn an acceptable wage during the forecast period. If you forecast a reduction in economic activity and you turn out to be correct, your future and the future of others may not be as bright.

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Finally, in this unit you will learn about the economic policies that can influence your forecasts for better or for worse. However, all forecasts are influenced by events that are unforeseen. Even these unforeseen events can have predictable effects when they occur.

Sincerely,

The *Capstone* Authors

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Handout 6-1-3
Building Models

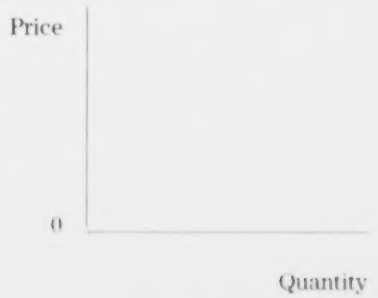
Directions: Use the information that follows and build models that satisfactorily summarize the information and relationships. Use the models to forecast people's behavior in the marketplace.

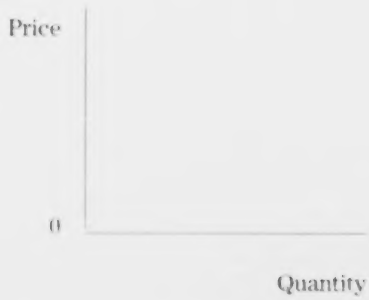
CASE 1
Consumers' ice cream cone buying behavior is summarized below.

Winter		Summer	
Price	**Quantity**	**Price**	**Quantity**
$0.25	100	$0.25	150
$0.50	50	$0.50	125
$0.75	25	$0.75	100
$1.00	0	$1.00	50

ASSIGNMENT:

Draw diagrams of the models.





Forecast consumers' behavior:

In the winter? In the summer? With changing prices?

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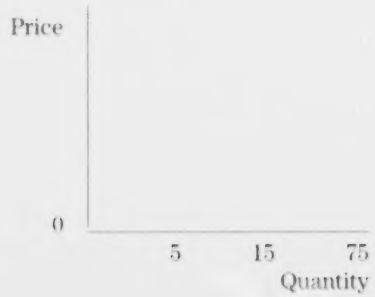
CASE 2

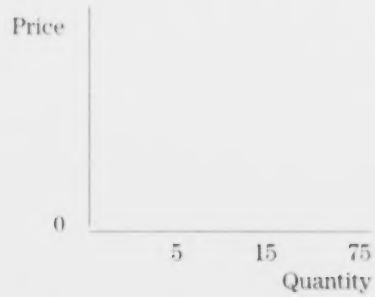
Suppliers' willingness to provide ice cream cones to the marketplace is summarized below.

Winter		Summer	
Price	**Quantity**	**Price**	**Quantity**
$0.25	0	$0.25	0
$0.50	25	$0.50	25
$0.75	50	$0.75	50
$1.00	75	$1.00	75

ASSIGNMENT:

Draw diagrams of the models.





Forecast suppliers' behavior:

In the winter? In the summer? When prices change?

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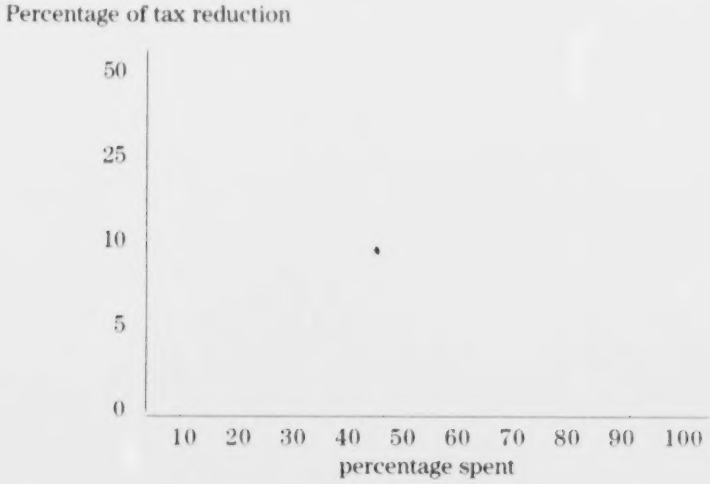
CASE 3

When the federal government reduces the tax rate, people spend a portion of their increased income. Their spending behavior is summarized below.

Tax Reduction	Percentage Spent
05%	98%
10%	96%
25%	90%
50%	83%

ASSIGNMENT:

Draw a diagram of the model.



When will consumers spend a larger share of their tax savings?

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Handout 6-2-1
I Made It In Junk

Here is an excerpt from a speech recently given to a *Capstone* class in Milwaukee. The speaker is Mr. Podowsky, President of the Valuable Collectibles Company. Mr. Podowsky is a very successful businessperson who understands how consumers' behavior in the marketplace directs resources and influences value.

Mr. Podowsky:

"Good morning, class. It is very nice to return to my old high school. I always thought I would come back to finish my education — not to speak to economics classes.

"I am president of Valuable Collectibles Company. Currently, my company has yearly sales of $2,000,000. This total has grown dramatically from 10 years ago when the year's sales were only $1,034.50. Of course, 10 years ago I was selling junk and today I sell valuable collectibles.

"If you haven't guessed, I am really a junk dealer — and proud of it! My business began after my decision to leave school early. I always liked junk, so I bought an old 1949 Chevy pick-up truck and went around collecting things people didn't want anymore. They even paid me to take things away.

"On the other side of town, I leased a piece of land across the train tracks to store what I had gathered. I was very organized and I divided my property into sections. Each section stored a specific category of merchandise such as furniture, tires, hubcaps, wood, glass, etc.

"My junk yard was neat enough, but few people then wanted to buy stuff from the past. Ten years ago people wanted new shiny furniture, new cars, and the like.

"Luckily, times have changed. About two years ago, many people started to want old things. Traditional furniture, antique cars, carved glass, are now being sought. More and more people visit my outdoor showroom and buy and buy and buy. One person actually bought the same piece of furniture he paid me to carry away seven years ago.

"Well, that is how it is. You never know, or do you? Anyway, that is how I made it in junk."

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Handout 6-3-1
Task Master

Group members: Time for Completion: _____

_____

_____

_____

_____

Complete the following tasks:

1. ADD

a	b	c	d	e	f
16457	90765	12345	76543	98765	56789
90874	14576	87654	76987	17659	87907
12876	87609	19785	93012	91436	19754
79569	87241	81603	90123	19236	80123

2. SUBTRACT

a	b	c	d	e
34	12345	67843	9865343	1234986734
12	11947	59999	8978469	0245986731

3. MULTIPLY

a	b	c	d	e	f
7	56	756	9807	23456	8976543
3	12	876	9870	37	999999

4. DIVIDE

a	b	c	d	e
4/2	23/6	543/37	49087/432	1640834/71

5. Solve for y when x = 3

a	b	c
$y + 4x - 2x/x$	$y = 12x$	$y = x/x + 12x - 3x$

6. Construct a 1" square.

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7. Construct a 90 degree angle.

8. Build a green paper airplane that flies.

9. Write the names, addresses, and telephone numbers of everyone in your group on a separate piece of paper.

10. Draw a picture of your economics teacher.

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Handout 6-3-2
Levels of Investment

Fred and Freeda own FF Service Company, a small automobile repair shop in Breakdown, U.S.A. They have been moderately successful in their business. For example, last year they found that they could afford to buy a computerized diagnostic machine, and they replaced an old broken down hydraulic lift. If business continues to improve they hope to add two more service bays next year.

Times were not always as good as they are now, however. When FF Service Company started five years ago, Fred and Freeda had to borrow all of the money they needed to build a small two-bay service facility. They used their life savings to buy the tool set and the air compressor necessary to start their business. Soon thereafter, they spent more money to buy protective fender covers which were just replaced this year with new fender covers.

After initial hard times, Fred and Freeda began to earn enough money from their business to enjoy some of the finer things in life while still building the business. Freeda fondly remembers their vacation to the Black Hills of South Dakota and the new car they bought. Fred enjoyed the vacation, too, but he also remembers the pleasure he received from the new welder and grinder he bought for the business. These items made the work easier and, in fact, they allowed FF Service Company to offer new services. Fred was sorry to see the old grinder go when he replaced it with a newer model that was so much faster and cheaper to run.

Perhaps the real turning point for the business was when they received a large service contract from the city, although that did mean hiring a new employee and buying another set of tools, a brake drum turner, an exhaust fan, and a tire mounting machine.

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Handout 6-4-1
Budget Data for Federal Government
U.S. Budget Receipts and Expenditures for Fiscal Year 1986
(in millions of dollars)

Net Receipts:

Individual income taxes	$348,959
Corporation income taxes	$ 63,143
Total employment taxes and contributions (Includes Social Security)	$283,901
Excise taxes	$ 32,919
Estate and gift taxes	$ 6,958
Customs duties	$ 13,323
Deposits of earnings — Federal Reserve Banks	$ 18,374
Miscellaneous receipts	$ 1,514
Total budget receipts	$769,091

Net Expenditures:

Legislative Branch	$ 1,665
The Judiciary	$ 1,969
Executive office	$ 107
Total funds appropriated to the President (Disaster relief, International development, etc.)	$ 11,377
Agriculture Department	$ 58,666
Defense Department (Military and Civilian)	$266,116
Education Department	$ 17,673
Energy Department	$ 11,025
Total Health and Human Services	$143,251
Housing and Urban Development	$ 14,193
Interior Department	$ 4,791
Total Justice Department	$ 3,768
Labor Department	$ 24,141
Transportation Department	$ 27,365
Total Treasury Department	$176,180
Environmental Protection Agency	$ 4,868
General Services Administration	$ 286
National Aeronautics and Space Administration	$ 7,403
Office of Personnel Management	$ 23,955
Small Business Administration	$ 490
Veterans Administration	$ 26,536
Total Independent Agencies	$ 11,422
Other	$158,734
Total Expenditures	$995,081

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Deficit $225,990

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Handout 6-4-2
Who Will Vote Affirmative?

Directions: Fill in the chart below by using your economic understanding. Specifically, your task is to accept the various roles provided, and to vote "Yes" or "No" on policies as you think the people represented by the role description would vote. Your *Handy Dandy Guide* will be helpful. Vote as you think these people would. Role #1 is yourself, Role #2 is a small business owner, Role #3 is a retired person, Role #4 is a wealthy person living in the big city, Role #5 is a Midwestern farmer.

In addition, predict what the policy in question would do to the nation's Gross National Product if it were passed. Place your prediction on the line labeled "Influence on GNP."

CASE #1

Congress is proposing to increase the spending of government by 10 percent. Given that no inflation has occurred in the economy, this is a net increase in expenditure to expand farm programs and assist other small businesses.

Vote: Yes or No

ROLES:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, Influence on GNP _____

CASE #2

The President wishes to reduce the deficit by cutting back on Social Security payments.

Vote: Yes or No

ROLES:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, Influence on GNP _____

CASE #3

An overall tax increase of 10 percent is proposed.

Vote: Yes or No

ROLES:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, Influence on GNP _____

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CASE #4

A decrease in government spending for all purposes is proposed.

Vote: Yes or No

ROLES:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, Influence on GNP _____

CASE #5

A reduction in taxes for all taxpayers is proposed.

Vote: Yes or No

ROLES:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, Influence on GNP _____

CASE #6

An increase in the budget of the Housing and Urban Development Department is proposed.

Vote: Yes or No

ROLES:

#1 _____, #2 _____, #3 _____, #4 _____, #5 _____, Influence on GNP _____

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Handout 6-5-1
Buy American? It Depends

Directions: Use this survey/interview sheet to determine what major purchases people in your community have made in the last month, whether the products were domestically-produced or foreign-made, and why people made the consumer choices they did.

Person interviewed: _____

Major purchases	Producer (foreign or domestic)	Reason
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Person interviewed: _____

Major purchases	Producer (foreign or domestic)	Reason
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

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Handout 6-5-2
Change My Mind

Directions: Read the case below carefully. Then change the economic environment so that J.J. will buy fewer foreign-made products. You can change the market variables and/or the attitudes and background of the buyer. Write your changes in the space provided.

Case

J.J. is a 25 year-old who has a good job in a large U.S. city. Being unmarried, J.J. has no family responsibilities, so most of the money he earns is spent solely at the discretion of J.J. J.J. drives a German-made automobile, a BMW, because most of his friends have one and he likes to be part of the group. J.J. also claims that the good handling of the car makes it safer.

When J.J. goes out to dinner (which is quite often, because he hates to cook), he usually buys a bottle of French wine. The wine tastes good and it impresses his friends.

Many of J.J.'s clothes, including his shoes, come from South Korea and Taiwan. Why buy American, says J.J., when you can get a high-quality foreign-made product for so much less? J.J. does buy some American-made products. J.J. buys many American-grown or prepared foods, and the furniture and the hunting rifle J.J. has are U.S.-made. "They are just better deals," claims J.J.

The Case Revised

Rewrite the case so J.J. will be less inclined to buy foreign-made products. Remember that J.J. is choosing to buy; use your understanding of the *Handy Dandy Guide* principles to help you with your revision.

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Handout 6-6-1
The Index of Leading Economic Indicators
A Crystal Ball on the Economy

Will my job opportunities be good in the coming year? Will my friends and relatives be enjoying higher salaries? The answers to these questions depend in large part on how strong the economy is. A robust growing economy creates new jobs and generates rising earnings. A weak economy makes jobs harder to find and the probability of raises smaller. One way to forecast the economic environment of the coming six months is to monitor the Index of Leading Economic Indicators (ILEI).

What is the ILEI and why might it give us advance notice of changes in the economy's direction? Can it warn us of a recession or offer us hope of a coming boom?

What are they? Why might they work? To explain what leading economic indicators are, let's consider each word separately. An "indicator" is anything (statistic, device, apparatus, etc.) used to measure the condition of something of interest. A thermometer can be used to indicate whether an individual has a fever. Although observing a chemical solution won't tell us whether it is acidic, we can use litmus paper to indicate that it is. So it is that statistics on unemployment or rates of inflation can indicate, or give us information about, the condition of the economy.

When we talk about "economic" indicators, we are interested in assessing the condition of the national economy. Economic indicators are statistical measurements rather than devices or apparati. Not all economic indicators are "leading," or "preceding." Some move right along with economic activity. These are known as coincident indicators. Others may turn up or down *after* the economy shifts. These are called lagging indicators.

But a "leading" economic indicator is a statistical measurement that historically rises prior to improvement in the economy and falls before the economy gets worse. Thus, changes in the indicator precede or "lead" changes in the economy, making leading economic indicators attractive as predictors of the course of the economy. Leading indicators receive much more attention than coincident or lagging indicators. Our present plans and policies influence the future, and leading economic indicators give us an idea of the likely condition of tomorrow's economy.

The most commonly recognized measure of national economic activity is the Gross National Product (GNP). GNP is the dollar value of final goods and services produced in the U.S. for a year. Unfortunately, forecasting GNP isn't as much fun as it might be because the Department of Commerce only issues figures on GNP for three-month periods (quarters). A similar measure of how the economy is performing is the Index of Industrial Production which monitors the quantity of productive activity in the country. This is announced monthly — so it can be used by amateur forecasters who want to see how accurate their forecasts are on a more frequent basis.

Economists spend a great deal of effort forecasting changes in the direction of the economy. When things are going well, it is difficult to tell if the economy might slow down in the future. When things are bad, it is hard to see better times in the future. But it is precisely these predictions that help current decision makers for companies and governments make the best choices.

Before the onset of a change in the general direction of the economy, many things usually have already changed. The ILEI concentrates on measurements that typically precede such changes in productive activity. The eleven measures are:

1. Average workweek for production workers in manufacturing.
2. Average weekly initial claims for state unemployment insurance.
3. New orders for consumer goods and materials.
4. Prices of 500 common stocks.
5. Contracts and orders for plant and equipment.

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6. New building permits.

7. Vendor performance, percent of companies reporting slower deliveries.

8. Net change in inventories on hand and on order.

9. Change in sensitive crude materials prices.

10. Percent change in total liquid assets.

11. Money supply.

Since all of these indicators do not always change in the same direction, a combination of all of them is calculated to give a general impression of their direction. This combination is the "Index" of LEI. A short description of each of these indicators and why they usually precede actual changes in national economic activity is included as Handout 6-6-2. To see how the business press reports information on this Index (and to see how even economists don't always agree on what the Index is telling us), look over Handout 6-6-3. You can continue to follow the trend of the ILEI by watching the evening news or reading the business sections of your newspaper near the last day or night of the month. In this lesson we are going to learn how to take information from this Index to generate our own forecasts of when the economy will next change direction.

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Handout 6-6-2
The Eleven Leading Economic Indicators

1. **Average workweek for production workers in manufacturing.**
Typically, workers in manufacturing are called on to put in overtime as the economy heats up. This overtime peaks before any indication of a slowdown in general economic activity. Similarly, the partial layoffs associated with a sluggish economy usually bottom out prior to the start of an economic recovery.

2. **Average weekly initial claims for state unemployment insurance.**
The number of people in the work force claiming unemployment benefits for the first time (in any particular cycle) tends to be lowest just prior to the peak of economic activity. As the economy worsens, the claims rise until initial claims peak, some time before the bottom of economic activity.

3. **New orders for consumer goods and materials.**
Since orders precede production, the level of orders is highest before the peak in production filling those orders. In the same way, the low point in new orders occurs before production is reduced to respond to the slack demand.

4. **Prices of 500 common stocks.**
This is almost entirely a gauge of financial investors' expectations, and since they are betting their own money, we might have reason to listen. If they believe the economy is going to improve in the near future and, with the improvement, corporations are going to enjoy larger profits which will be returned in some form to the shareholders, the prices of stocks will be bid up. Conversely, if bad times lie ahead due to an expected decline in economic activity, then stock prices should fall.

5. **Contracts and orders for plant and equipment.**
This combines traits of new orders for consumer goods and net business formations. The supplier receives fewer orders before he slows his production. As with orders for consumer goods, it is natural for a high point in contracts and orders for plants and equipment to precede a high point for production. From the perspective of the firm placing the order, orders for plant and equipment are made today, based on an expectation of tomorrow's economic environment. Therefore, like net business formations, we would expect these orders to reflect the forward-looking nature of equipment purchase decisions.

6. **New building permits.**
Since a permit must be obtained prior to construction, and since most construction takes place prior to sale, we would expect more contractors to seek permits when they think the economy will be healthy enough to make it likely that they will be able to sell their goods. On pre-sale contracts (when the sale is agreed on prior to construction), we would expect that the purchaser anticipates good conditions by the time construction is completed. When the contractors are pessimistic about the chances of selling their product or pre-sale purchasers are worried about what the condition of the economy will be when the construction is finished, there would be a decline in applications for permits.

7. **Vendor performance, percent of companies reporting slower deliveries.**
As demand for firms' output increases, they find it more difficult to meet all their deliveries as scheduled. The more orders to fill, the more they fall behind. So, as orders for deliveries precede purchase, the peaks of late deliveries tend to precede the peaks of economic activity.

8. **Net change in inventories on hand and on order.**
Firms stock and order inventories in anticipation of sales. When sales are brisk, firms liberally add to inventories to replace goods sold. When times are hard and items spend more time on the shelf, firms are not as likely to replace all goods sold by ordering or stocking more inventory. Therefore, when firms stop adding as much to their inventories, it indicates an anticipation of slower sales. When they increase the rate at which they add inventories, it marks an anticipated pick-up in sales volume.

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9. **Change in sensitive crude materials prices.**
These are prices of materials used in production, which are particularly sensitive to changes in demand. Since manufacturing plants maintain a stock of such materials, their purchases are based on anticipated use in an upcoming period. As the demand for these products falls, signaling an expected decline in production, the prices of the materials also fall. Therefore, changes in the prices of these commodities tend to lead changes in production levels.

10. **Percent change in total liquid assets.**
As the public's liquid wealth increases, its willingness to purchase goods and services rises. Note that this increase in willingness to purchase precedes the actual purchase. Therefore, increases in public liquidity would be expected to precede increases in economic activity.

11. **Money supply.**
While very similar to #10, this is a more narrow definition of public liquidity which includes currency, checking accounts, and various liquid savings instruments, among others. As with liquidity, increases in the money supply usually encourage spending.

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Handout 6-6-3

Economic indicators down again

The New York Times

WASHINGTON — The government's chief gauge for predicting the economy fell 0.1 percent in September, the third decline in the latest five months, the Commerce Department said Tuesday.

Although most economists had been expecting a small rise in the index of leading indicators, they focused Tuesday on the sawtooth pattern that has developed in the index since late spring.

They cited that, along with other figures, as evidence that the economy has clearly begun to slow.

"Some of the momentum has been left behind," said Robert A. Brusca, chief economist for Nikko Securities Company International, a Wall Street firm. "I think the index is forecasting some further sluggishness."

Last week the department said the economy expanded at a rate of 2.2 percent in the third quarter, below the average growth of the gross national product for the first half of the year even after allowing for a substantial loss of output from this summer's drought.

Few experts, however, found in the recent data enough negative factors to predict that a recession will begin in the next several months. One saw only "a flat spot," another "a stutter" in the rate of growth.

"The slowing is real, but it doesn't look dangerous," said David R. Bostian of Bostian Research Associates, a consultant whose private forecasting index has now fallen for four consecutive months.

There was little reaction in the financial markets to the report on the index of leading indicators.

Some selling in the bond markets resulted from Tuesday's Commerce Department report of a September rise of 0.6 percent in construction spending, an increase that was higher than expected.

The leading index, which is designed to foretell turning points in the economy, so far lacks any of the three basic requirements of decline — in terms of persistence, magnitude or breadth — needed to conclude that a recession is on the way.

Four of the nine available components in the leading index contributed to the September decline.

The biggest drag came from a decline in orders for new plant and equipment, which some said largely reflected a fall-off in aircraft and cars following hefty increases.

Additional downward pressure came from a decline in building permits, in prices of materials particularly sensitive to the business cycle and in the M-2 money supply.

The five advancing components were a rise in the average workweek, a decline in initial weekly claims for state unemployment insurance, higher stock prices, a rise in the percentage of companies reporting slower deliveries from suppliers, and higher manufacturers' new orders for consumer goods and materials.

Statistics that forecast our economy

Economists watch the Index of Leading Economic Indicators to see what the economy will be doing during the next six months. The index takes into account the eleven statistics reviewed here:

Index of leading indicators
The main index that includes the 11 others shown

Down 0.1%

Building permits
Monthly total building permits issued

Down 4.7%

Manufacturing labor hours
Average hours employees work per week

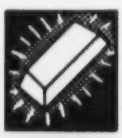
Up 0.5%

Total inventories
Inventories on order and on hand

Not avail.

Unemployment claims
Weekly claims on unemployment insurance

Down 5.0%



Commodity prices
Change in sensitive materials prices

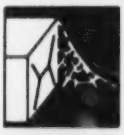
Up 0.3%

New durable goods orders
Orders for mfg., consumer goods and materials

Up 0.3%

Stock prices: S&P 500
Stock prices, 500 common stocks

Up 1.6%



Delayed deliveries
Percent firms getting delayed deliveries

Up 0.3%

Money supply M2
Real money supply, month average

Down 0.2%

New plants & equipment
Contracts and orders, plant and equipment

Down 13.5%

Outstanding credit
Commercial and consumer outstanding debt

Not avail.

SOURCE: Bureau of Economic Analysis, U.S. Dept. of Commerce

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Handout 6-6-4
Forecast Practice Run I

Date (Mo/Yr)	Annualized % Change in Index of Leading Economic Indicators	For the Last 6 Mos. # Positive Changes	For the Last 6 Mos. Average Change	Annualized % Changes in Index
9/78	5.0			
10/78	9.4			
11/78	−2.4			
12/78	−3.4			
1/79	4.2			
2/79	−1.6	_____	_____	_____
3/79	15.7	_____	_____	_____
4/79	−21.0	_____	_____	_____
5/79	10.3	_____	_____	_____
6/79	−8.6	_____	_____	_____
7/79	−10.1	_____	_____	_____
8/79	−5.6	_____	_____	_____
9/79	0.0	_____	_____	_____
10/79	−20.9	_____	_____	_____
11/79	−12.7	_____	_____	_____
12/79	3.5	_____	_____	_____
1/80	−7.3	_____	_____	_____
2/80	−13.4	_____	_____	_____
3/80	11.7	_____	_____	_____
4/80	27.5	_____	_____	_____
5/80	−0.8	_____	_____	_____
6/80	−10.3	_____	_____	_____
7/80			_____	

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Handout 6-6-5
Quick and Dirty Guidelines for Interpreting The Index of Leading Economic Indicators

In interpreting the ILEI, economists look at three characteristics of the recent trend.

1. Persistence — how consistent the recent trend has been.
2. Magnitude — how large the changes are.
3. Breadth — how widespread the direction of change among the eleven indicators is.

For this "quick and dirty" technique, we focus only on the first two: Persistence and Magnitude.

Persistence

Because the Index can fluctuate from month to month, we need a majority of recent months to show the same sign before we think the indicators are predicting a direction with some certainty. By looking at the signs of six consecutive months and counting the number of positive changes, we can get some indication of the likelihood of changes in the economy occurring in the future (usually 4 to 6 months out). See the Persistence Chart.

Magnitude

Large changes in the ILEI usually indicate that more powerful changes in the economy are on the way. To measure the *size* of recent changes in the Index, the last six months' annualized rates of change can be averaged (i.e., added up and divided by six). By looking at this average, we can get some indication of the strength of the signal being sent by our indicators (see the Magnitude Chart).

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Handout 6-6-6
Using Annualized Percentage Rates of Change on the Index of Leading Economic Indicators

PERSISTENCE CHART

If the number of positives in the last six months is:	Then the economy in the next 4 to 6 months:
6	is almost certain to be strong
5	is likely to be strong
4, 3	(no strong direction in either direction is likely)
2	might possibly suffer a downturn
1	is very likely to suffer a downturn
0	is almost certain to suffer a downturn

MAGNITUDE CHART

If the average in the last six months is between	Then the economy in the next 4 to 6 months is
+9% and +25%	likely to experience a very *strong increase* in activity (Boom times are coming!)
0% and +8%	likely to experience a *moderate increase* in activity (Boring but nice!)
−4% and 0%	likely to experience a *moderate decrease* in activity (Weak but not too painful)
−12% and −5%	likely to experience a *strong decrease* in activity (Severe pain involved)

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Handout 6-6-7
Forecast Practice Run II

Date (Mo/Yr)	Annualized % Change in Index of Leading Economic Indicators	For the Last 6 Mos. # Positive Changes	For the Last 6 Mos. Average Change	Annualized % Changes in Index
10/81	−18.8			
11/81	0.9			
12/81	−6.8			
1/82	−9.3			
2/82	5.5			
3/82	−8.5	_____	_____	_____
4/82	12.2	_____	_____	_____
5/82	1.8	_____	_____	_____
6/82	−6.0	_____	_____	_____
7/82	6.4	_____	_____	_____
8/82	−0.9	_____	_____	_____
9/82	13.1	_____	_____	_____
10/82	10.0	_____	_____	_____
11/82	7.2	_____	_____	_____
12/82	13.7	_____	_____	_____
1/83	43.4	_____	_____	_____
2/83	19.8	_____	_____	_____
3/83	25.3	_____	_____	_____
4/83	20.0	_____	_____	_____
5/83	16.0	_____	_____	_____
6/83	25.0	_____	_____	_____
7/83				_____
8/83				_____
9/83				_____

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Handout 6-6-8
Forecast Worksheet

Date (Mo/Yr)	Annualized % Change in Index of Leading Economic Indicators	For the Last 6 Mos. # Positive Changes	For the Last 6 Mos. Average Change	Annualized % Changes Index of Industrial Production
3/87	10.8			2.9
4/87	0.0			0.0
5/87	6.6			7.8
6/87	12.8			8.8
7/87	3.2			14.9
8/87	5.1			5.7
9/87	1.3			−2.7
10/87	0.6			10.6
11/87	−14.0			4.6
12/87	4.5			6.5
1/88	−2.5			4.6
2/88	9.9			0
3/88	1.9			2.7
4/88	6.4			6.4
5/88	−8.4			6.4
6/88	19.1			3.6
7/88	−6.6			13.0
8/88	4.5			
9/88	−0.6			
10/88				

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UNIT 7
INTERNATIONAL ECONOMICS ISSUES

Student Handouts

Handout 7-1-1
Economic Reasoning Quiz

1. The economic goal of international trade is to provide jobs for workers.
   A. True
   B. False

2. If the U.S. imports more products from Japan than it exports to Japan, the total number of jobs in the U.S. will decline.
   A. True
   B. False

3. Tariffs protect our standard of living by reducing competition from cheap foreign labor.
   A. True
   B. False

4. A "strong dollar" in international currency markets is good for the U.S. because it reduces the amount of imports purchased by Americans.
   A. True
   B. False

5. The existence of large, rapidly growing populations is the principal reason for poverty in third world countries.
   A. True
   B. False

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Handout 7-1-2
Letter to *Capstone* Students

Dear *Capstone* Student:

It is time to look beyond our national borders. Perhaps you noticed that previous lessons included some examples of international trade. The lessons in Unit 7 concentrate on international trade. Such trade is growing and will continue to grow in the future. International trade is becoming increasingly important even to large, more self-sufficient economies including those of the United States, the Soviet Union, and the People's Republic of China.

Differences among nations make international trade more difficult to carry on than domestic trade.

Why study international trade? After all, isn't it just like trading domestically? The answer is: not quite. International trade is more difficult. From country to country, people use different currencies, speak different languages, follow different laws, are influenced by political differences which can make trade difficult to arrange. Yet, for all the obstacles, trade does take place. Even the production and sale of a simple product like a pencil may involve people from Europe, South America, Asia, and the South Pacific.

The importance of international trade requires that we concentrate on how it differs from domestic trade, and that we learn to use economic reasoning to predict how people may respond to possible difficulties that can be involved. In early 1988 Alain Madelin, the French Minister for Industry, was asked, "What can we [Americans] do to help you Europeans?" He replied, "It's very simple. Put trade barriers between the 50 states, use different currencies, and speak different languages. That's the best way to put Europe on a par with the United States." As these words imply, barriers to trade make it more difficult to achieve rapid economic growth. So why do barriers exist and why do people support them? You will find some answers to these questions in the following lessons.

Rich countries and poor countries: why do such differences exist?

The second major issue deals with the income levels of different countries. Imagine two countries. Country 1 has a large amount of fertile land for growing crops and raising animals. In 1900 it was the fifth largest economy in the world. It also has vast natural resources of petroleum and important minerals. Separated by one large ocean from Asia and from Europe by another, it hasn't been devastated by war. Its population is growing, but it isn't over-populated compared to other countries.

Country 2 has a small amount of land and a very large population. It was devastated during World War II. It has very few natural resources and little farmland. It must import most of its economic resources.

You can go wrong if you don't have the right clues.

Of these two countries, which would you expect to be the richest? At first glance, Country 1 seems to be a good choice, but remember to apply economic reasoning. What clues would help you find an accurate answer? Notice that no information is given about economizing choices, the economic system, the incentives, or trade relations which might be in effect.

The principles of economic reasoning help explain economic differences among countries.

If you forgot to remember these principles of economic reasoning, you may have been distracted by the wrong clues. Country 1 is Argentina — which has become a relatively poor country in recent decades. Without its petroleum sales to the rest of world, it would be in desperate shape. Country 2 is Japan — one of the world's economic success stories.

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In the rest of this unit, we'll invite you to use economic reasoning to explain and unravel the economic mysteries that exist in the world economy.

Sincerely,

The *Capstone* Authors

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Handout 7-3-1
Why People and Nations Trade

At first glance the answer to the question, "Why do people and nations trade?" seems to be "they want something they cannot produce themselves." For example, a trader might want commodities such as exotic fruit, spices, precious metals, and other natural resources. However, producers and consumers do not decide to engage in trade merely for goods or services they cannot produce for themselves. The fact is that countries whose citizens engage in international trade could produce much of what they import and, in many instances, have major domestic industries which do produce the same types of products which are imported. An obvious example of this behavior in the United States is the importation of foreign steel, which competes with American-made steel.

A complete answer to the question, "Why do people trade?" is that international trade, like other voluntary exchanges, exists because both the buyer and the seller gain from it. If both parties did not expect to gain, there would be no trade between them.

If the decisions to buy foreign-produced products (such as Toyotas, stereos, tin, and bananas), and to sell other products abroad (computer software, corn, and Levis), are viewed as *opportunities to gain*, we develop a more accurate perspective on the trade question. Every act of trade is undertaken because both the buyer and the seller *think* that they will gain from the trade.

Each trader — exporter and importer alike — responds to the positive incentive of gain. Consumers are not much different: they also respond to positive incentives. For buyers (importers), the positive incentive is to gain — usually by giving up something, usually money — to get something they value more — usually goods or services. Each time a purchase is made it is because the purchaser would rather have the good or service than the money. The same is true for the sellers (exporters) who gain by giving up a good or service to get something they would rather have — money. If both buyers and sellers, importers and exporters, get something of greater value than they give up, then trade has made each of them better off.

The key to understanding the incentive to trade for either the buyer or seller is to remember that people trade something which has a lesser value to them in order to gain something having a greater value to them. Notice how this incentive works in the trade of U.S. wheat for Honduran bananas.

U.S. farmers *could* grow bananas in greenhouses, yet the United States prefers to buy imported bananas. Why? The answer is obvious but important. To grow bananas, U.S. farmers would give up valuable land, time, and money to buy the necessary equipment and greenhouses. They gain more economic rewards if they concentrate on wheat production. Their land and climate are better suited for growing wheat. Must America then go without bananas? Again, the answer is an obvious "no." American farmers can sell wheat abroad for dollars and use some of these dollars for bananas grown by a Honduran in a climate and geographic setting well-suited for growing bananas. In other words, either directly (by selling wheat to Honduras and using the dollars earned to buy bananas) or indirectly (by selling wheat to some other country and using the dollars to buy bananas grown in Honduras), Americans trade wheat grown in the United States for bananas grown in Honduras.

Applying the concept of opportunity cost to this trade, we can observe how specializing in the production of less costly goods and trading for products which would require greater opportunity cost increases total production (the principle of *comparative advantage*). Comparative advantage means having a relative cost advantage in the production of one type of good or service as compared to the production of some other good or service. This means that even if Country A can produce both of two different goods more cheaply than Country B can, it will still benefit A to specialize in the good which it can produce most cheaply compared with another country. Country A will *export* that good to B and *import* the other good from B. From B's point of view, it is exporting the good which it can produce relatively more cheaply and importing the other good. Thus both trading partners can gain if they specialize in the production of those things they produce at the lowest relative cost.

The ability to trade will also help determine the set of products a nation or region can produce at the lowest cost. In the early 1800s, certain regions of the United States were probably best-suited to specialize in grain production. Nevertheless, farmers had to be self-sufficient and produce many other products because relatively few opportunities for trade among the various regions existed. Only after the development of the railroads made it reasonably easy to transport goods and therefore to engage in trade throughout the United States did farmers begin to concentrate almost entirely on producing the crops most efficiently grown

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in their region. The ability to trade has improved so much that many of today's U.S. businesses produce not only for domestic consumption, but for international trade as well. Soybeans in Illinois, lumber in Oregon, airplanes in Washington, and genetic technology in Massachusetts are all produced with the expectation that these products can be sold internationally.

Every time you buy a product which has been produced — even in part — in a foreign country, you send a message to importers in this country and exporters in other countries that you think you can gain by buying certain types of products produced in other countries. What was your incentive to buy the imported good? Why don't individuals make all the television sets, cars, shirts, or shoes they buy? Or grow their own bananas? The decision of Americans to trade for these products illustrates that the concept of comparative advantage influences your economic choices.

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Handout 7-3-2
Why Do People Buy Foreign Goods?

Directions

To learn why people participate in international trade, it is helpful to examine your own behavior and compare it with the behavior of others. In this exercise you are asked to explain an imaginary purchase you might make, acquire some information from other people about their purchases, and to analyze these behaviors to see if they are consistent with the generalization that incentives influence trading decisions. Read each question in this handout carefully and attempt to answer each completely.

The Problem

You have decided to start a regular jogging program, and you think you will want a pair of good quality running shoes. Because this jogging program is important to you, you have taken $50 of your savings to spend on shoes if you need to. Looking in a few sporting goods stores, you have found three brands of mesh-top shoes of similar style that you like. The prices are:

$32.99
$31.99
$45.99

Remember, they are of similar style, and you like all three. On the basis of price only, which pair would you purchase?

Check one: _____ $32.99
_____ $31.99
_____ $45.99

The shoes that you are considering are produced in three different countries. The countries are:

Korea
France
United States

Considering the identity of the country which produces the shoes, which would you purchase?

_____ Korea
_____ France
_____ United States

Considering both the price and the country in which the shoes are produced, which will you purchase?

_____ Korea $32.99
_____ France $31.99
_____ United States $45.99

What was more important in your decision? (In thinking about your decision, remember that the three pairs of shoes were of the same quality and style.)

Did your incentive to gain from the purchase influence your choice?

Do you gain anything by purchasing the French-made shoes instead of those made in the United States? If so, what?

Why do you suppose other people in your community purchase imported goods? To find out, you could survey a small number of people.

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The Survey and Comparison

Pick one imported good in your home and ask your parents why they purchased that good. Was it price? Quality? Country of production? Ask them if they felt they gained in buying the imported good instead of a similar good produced in the United States.

Interview merchants in your city and ask if any imported goods are offered for sale. If so, why? Is it because of price? Quality? Country of production? Ask the merchant if he or she gains by selling the imported good instead of selling only goods produced in the U.S.

After you have conducted your interviews, compare the reasons these people give for purchasing imported goods with your decisions on which running shoes to purchase. Were their incentives similar to or different from yours? Why or why not?

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Handout 7-3-3
The Hatfields and the McCoys

The Hatfields and the McCoys don't talk to each other very much. They would rather shoot at each other than smile. The Hatfields are better off than the McCoys in every way. Why, it takes only eight hours for one Hatfield to grow one bushel of corn and only 10 hours for one Hatfield to make one yard of cloth. It takes a McCoy more time to produce both the corn and the cloth.

The McCoys aren't any more (or less) shiftless than the Hatfields. It's simply that their land is worse and their tools aren't as good. It takes 15 hours for one McCoy to grow one bushel of corn and 12 hours for one McCoy to make one yard of cloth. The McCoys are worse off than the Hatfields because they have to work longer for everything they want.

Now, old Ma Hatfield is a sly one, and she's been sitting and rocking and thinking for years and years. One day she said, "Pa! Pa! I've been cogitating. You know what I think? I think we'd be a whole lot better off if we stopped fighting the McCoys, spent more time raisin' corn, and tradin' with the McCoys when we need cloth."

Pa spat. "Darnit, woman," he said. "We are better farmers than those varmints and better weavers, too! Besides, I don't want to be dependent on that poor excuse of a family for my clothes."

Can you help Ma and Pa settle this? Using the following worksheet, try to figure out who is right.

To produce corn and cloth, the Hatfields must spend:

_____ hours for 1 bushel of corn
_____ hours for 1 yard of cloth
Total hours = _____ hours for total production of 1 bushel of corn and 1 yard of cloth

To produce corn and cloth, the McCoys must spend:

_____ hours for 1 bushel of corn
_____ hours for 1 yard of cloth
Total hours = _____ hours for total production of 1 bushel of corn and 1 yard of cloth

If the Hatfields produced only corn, and traded 1 bushel of corn for 1 yard of cloth, they would spend:

_____ hours for 2 bushels of corn
Total hours = _____ to have 1 bushel of corn and 1 yard of cloth through trade

If the McCoys produced only corn, and traded 1 yard of cloth for 1 bushel of corn, they would spend:

_____ hours for 2 yards of cloth
Total hours = _____ to have 1 yard of cloth and 1 bushel of corn through trade

If the Hatfields and McCoys specialize in the lowest cost production, will they gain any time?

Will both families gain in the trade?

Are there any reasons to choose not to trade?

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Handout 7-3-4
Europe's Big 1992 Goal: Truly Common Market

By Steven Greenhouse

PARIS, March 13 — Alain Madelin, as France's Minister for Industry, has pushed French industry to prepare itself for 1992 — the deadline that the 12 nations in the European Community have set for creating a truly common market by eliminating their internal commercial, financial and customs barriers.

Although tariffs within the Common Market disappeared long ago, Europe has remained a fragmented market with many obstacles to trade. There are still long waits at national borders, for instance, and different television standards.

The 12 nations hope to eliminate the remaining trade barriers so that tourists and truck drivers can go from Copenhagen to Lisbon without stopping at customs. The nations also hope to eliminate the differing industrial standards that raise production costs and create trade barriers.

The reduction in inefficiencies should help cut costs for companies and prices for consumers. That, in turn, should spur Europe's sluggish economy and help make European companies more competitive against American and Japanese industry.

Mr. Madelin is one of France's — and Europe's — most outspoken supporters of the 1992 objectives.

Q. Why is 1992 so important for Europe and European business?

A. Years ago a friend told me that an American once asked a European, "What can we do to help you Europeans?" The European responded: "It's very simple. Put barriers between the 50 states, use different currencies and speak different languages. That's the best way to put Europe on a par with the United States."

Since the Americans have not followed this advice, we think it's necessary to do the opposite — to achieve a true common market of 320 million consumers without internal borders. That's why we adopted a program in 1985 with the aim of achieving that goal in 1992. It is an extraordinary opportunity for Europe since it will permit the optimum use of the factors of production: people's talents, capital, a more efficient division of labor.

Q. Do you think 1992 will make European business more competitive vis-à-vis the United States and Japan?

A. Yes, because our companies will have a readily accessible base of 320 million consumers, a unified market, which will allow for economies of scale. In particular, this is an opportunity for small and medium-size companies to gain access to a market six times larger than they have in any single European nation. Besides, it's evident that a market without physical borders, without fiscal borders, without borders of any sort, will permit better use of the factors of production and greater productivity for European business.

Q. Will 1992 create more entrepreneurism in Europe?

A. Yes, but it is a movement that we have noticed in Europe and particularly in France over the last few years. In France we have just broken the record for business starts with 274,000 in 1987. If we keep that rhythm between 1987 and 1992, we'll have 1.5 million new entrepreneurs. That's a considerable number.

Besides, to obtain the necessary degree of competitiveness in the world market, and profiting from the perspectives of 1992, we are seeing major Eurpopean-minded movements by our corporate leaders. Acquisitions, mergers and alliances have made Europe a true field of maneuver for entrepreneurs.

Q. What in your view are the greatest obstacles to achieving a unified market in 1992?

A. The biggest obstacles are internal borders that discourage the movement of ideas, of capital, of talent, of the factors of production. In addition there are a number of rigidities in education, in the social system, in taxation, in the legal system that have to be overcome. The idea of 1992 means that we have to give companies a more competitive environment.

Q. In Europe many governments traditionally protect companies from competition. By eliminating trade barriers, won't 1992 create problems for these protected companies?

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A. The evidence shows that a protected company is a less competitive company. It is competition that makes competitiveness. Rather than suffer from a great shock in 1992, protected companies or sectors must open themselves progressively to the perspectives of 1992 so that there is a smooth transition over the next five years rather than shock therapy.

Q. Many European governments have public procurement policies that greatly favor their own companies. What is happening on that front?

A. Public procurement markets are naturally protected and often involve state-owned utilities. While we want to try to make these procurement markets more open to European competition — and there is a European effort in this area — for a long time there will still remain a nationalistic reflex in public procurement.

Q. Several European nations have adopted protectionist measures against trading partners, especially Japan. What will 1992 mean for Europe's trade policy?

A. It will create a common, more active trade policy for Europe. That will likely mean there will be a greater requirement of reciprocity with Europe's trading partners. We are offering a unified market of 320 million consumers. That is a big opportunity for people who want to develop their sales in Europe, but they can do so only on one condition: that the Europeans are allowed to develop their sales in those countries.

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Handout 7-4-1
Trade Restrictions

1. *Tariffs*

Tariffs, or duties as they are sometimes called, are the most common type of barrier to trade. A tariff is simply a tax that must be paid by foreign producers to the U.S. government when imports arrive in the U.S. This tax raises the cost to importers and helps domestic producers of similar products to sell at higher prices.

For example, if domestic steel costs $150 per ton to produce, but Japanese steel can be imported for $120 per ton, a tariff of $40 per ton will give domestic producers a cost advantage, i.e., enable them to be more competitive. Naturally, this tariff raises the production costs of firms which must use steel to produce their goods. Ultimately, the consumers who buy these products will pay higher prices.

2. *Quotas*

A quota is similar in effect to a tariff. While a tariff restricts imports by making them more costly, a quota simply limits the amount of a product that can legally be imported. The reduction in the supply of the import available will create a shortage and cause the price of the good to rise. This allows domestic producers of the good to increase their prices and to expand their production. Again the effect is ultimately to raise the prices consumers pay for the goods they buy.

Although the effects of tariffs and quotas are very similar, there is one important difference. With a tariff, the domestic government collects some revenues. A quota, however, allows producers in the exporting country to collect the revenue. Typically, exporting firms will export less than they would like. Their government will then have to decide which firms will be allowed to export to the country imposing the quota and the amounts each exporter will be allowed to send there. The exporting firms will find it profitable to pay the government for the right to export, thereby providing the export country's government with the revenues that the importing country could have collected through a tariff.

3. *Embargoes*

Sometimes politics dictates that a country must halt the export or import of a particular product or group of products to or from another country. At times political influences might even force a halt to all trade with a country. This elimination of trade is known as an embargo. You might think of an embargo as an extreme case of a quota (without any revenues involved), and, in fact, the effects are similar, if not more severe.

4. *Standards*

Besides tariffs, another effective way to increase the cost of imported goods is to require that they meet certain standards. For example, a country could require that agricultural products be quarantined and closely inspected upon arrival, or that imported automobiles meet stiff mileage and pollution requirements. If such requirements are imposed in a discriminatory manner on imports, the cost of imports will rise in comparison to the cost of domestic products that do not have to meet these standards or requirements.

5. *Subsidies*

Instead of attempting to increase the costs importers face, a country can also protect its domestic producers by giving them a subsidy. The subsidy, in effect, lowers the costs of domestic production. Although the creation of subsidies would appear to decrease prices and make domestic consumers better off, remember that the subsidy has to be paid for by someone. In fact, the subsidy will be funded out of taxes levied on all taxpayers. Thus, everyone pays for the benefit given to producers of the subsidized good. Tariffs have the virtue of requiring only those who buy the products subject to the tariff to pay the costs of the tariff.

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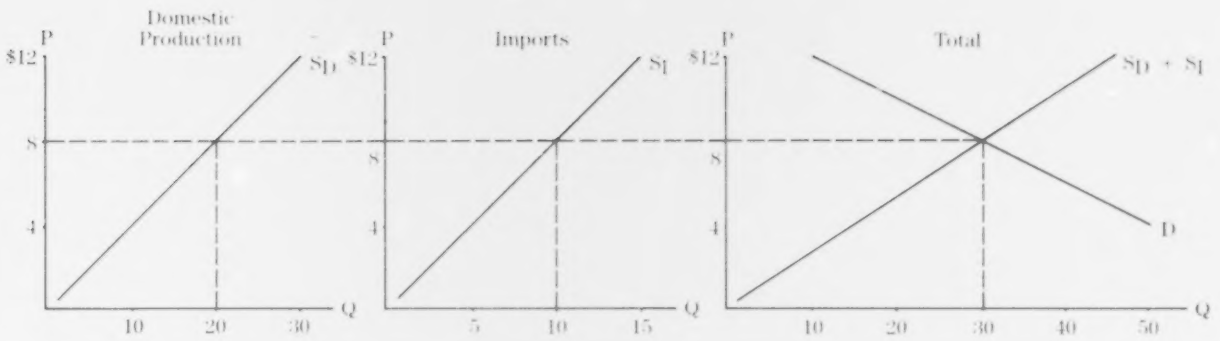
Handout 7-4-2
Tariffs

Exhibit 1: Free Trade Situation



The exhibit above demonstrates how you can determine the total supply of a good that is imported and produced domestically.

The left hand graph shows that, at a price of $8, 20 units would be produced domestically, while the middle graph shows that, at the same price, importers would like to sell (supply) 10 units. This information is combined in the right hand graph, which shows that 30 units total would be supplied at the $8 price. Other points on the right hand graph are similarly constructed.

The position of the demand curve indicates that the equilibrium price is in fact $8, and the equilibrium quantity is 30. Of this total, domestic producers will supply 20 units and importers will supply 10.

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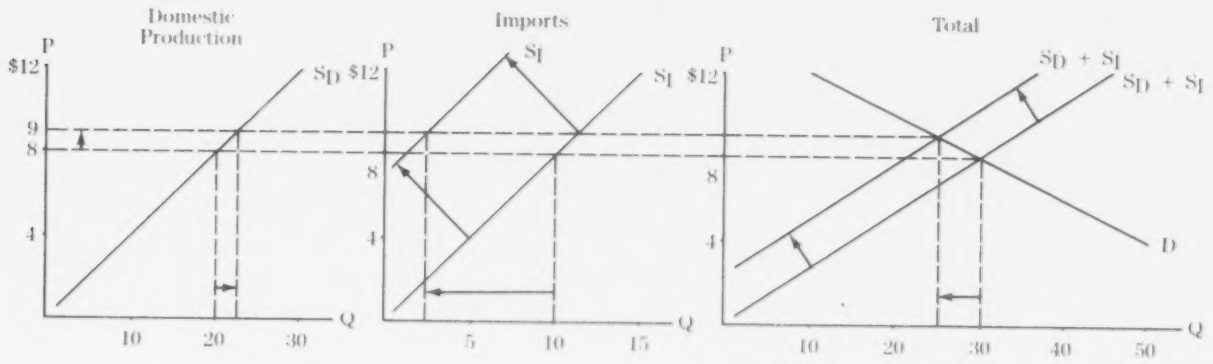
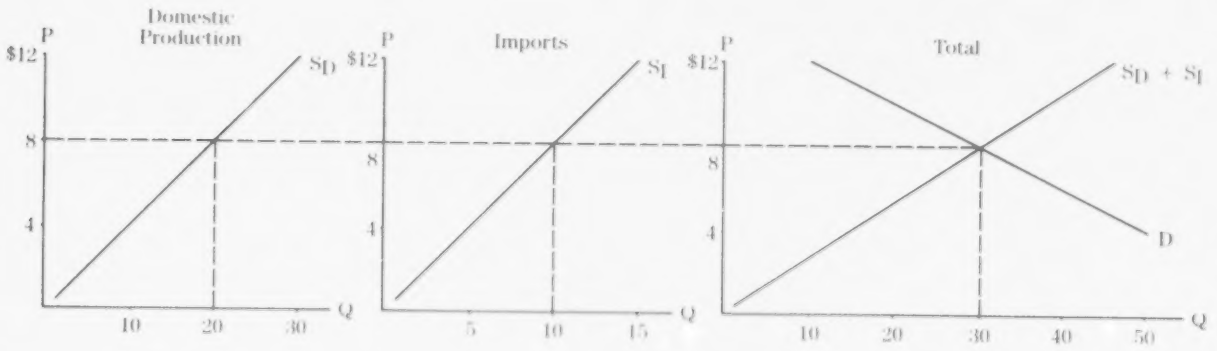
Handout 7-4-2, continued.

Below, the diagrams are modified to reflect enactment of a tariff. Note that equilibrium price and domestic production rise while imports fall.



Quotas

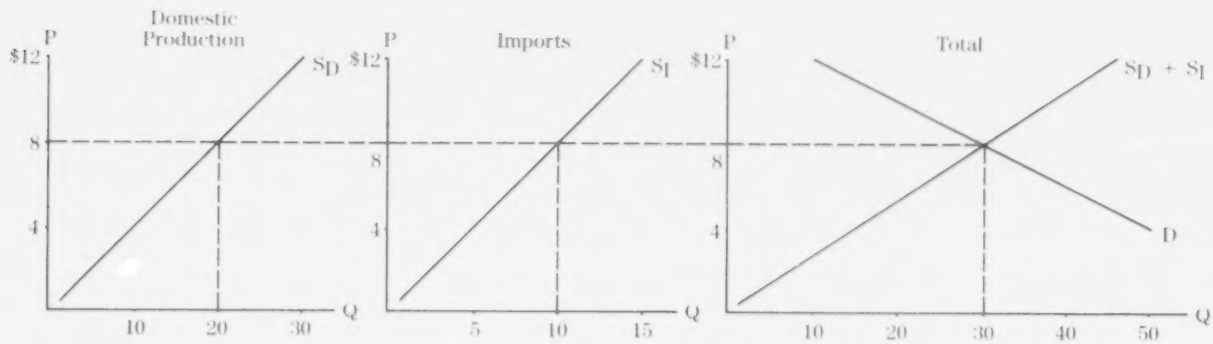
Look at Exhibit 1. Modify the "free trade" situation it shows to reflect the enactment of a quota, limiting imports to 5 units. Indicate the effect on price, domestic production, and imports.



Handout 7-4-2, continued.

Subsidies

Look at Exhibit 1. Modify the "free trade" situation it shows to reflect the enactment of a subsidy to domestic producers. Indicate the effect on price, domestic production, and imports.



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Handout 7-4-3

Group A: Debate Preparation

The Controversy Over Foreign Cotton: The Case for Protection

Directions

Your group represents the cotton-growing farmers of the United States. Read the paragraph below and decide what actions your group might want to take concerning the use of free trade, tariffs, quotas, or subsidies. Answer the questions that follow the paragraph, and state your reasons.

The increased prices that your industry has been forced to pay for fertilizer, seed, machinery and farm labor have made it impossible for you to compete with imported cotton from Mexico and other countries. More and more textile mills are buying their cotton from other countries. Your group plans to lobby in Congress for the purpose of imposing some restrictions on imports of foreign cotton.

1. What action or actions does your group seek?

2. What will be the effects of such action on your group?

3. What will be the effects of such action on domestic consumers of cotton products?

4. What will be the effects of such action on foreign cotton producers?

5. What are some possible alternative solutions to the problem?

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Handout 7-4-4

Group B: Debate Preparation

The Controversy Over Foreign Cotton: The Case for Free Trade

Directions

Your group represents textile-mill operators in the United States. Read the paragraph below and decide what actions your group might want to take concerning free trade, tariffs, quotas, or subsidies. Answer the questions that follow the paragraph, and state your reasons.

The farmers in Mexico and other countries are able to grow cotton more cheaply than the growers in the United States. The reason for the difference is that foreign growers pay lower costs for fertilizer, seed, machinery, and farm labor. Hence, your industry can import cotton more cheaply than the industry can obtain it in the United States. Thus cotton producers in the United States are attempting to place restrictions on the importation of cotton. Your group wants its interests to be considered in the final decision. Decide what you would or would not favor.

1. What action or actions does your group favor?

2. What will be the effects of such action on your group?

3. What will be the effects of such action on other individuals in the society?

4. What will be the effects of such action on foreign cotton producers?

5. What is a possible alternative solution to the problem?

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Handout 7-5-1
Imbalance of Payments

Imagine yourself eating lunch at a posh Washington, D.C. restaurant. Seated at the next table are MS. DEFICIT, a U.S. trade negotiator, and her West German counterpart, HERR PLUS. Let's listen in on their conversation as they discuss the trade problems of their respective countries.

Ms. Deficit: This imbalance in our trade cannot continue. The deficit in the U.S. balance of payment accounts has put many of our exporting companies out of business and is pushing the United States into a recession.

Herr Plus: My country agrees that the situation cannot continue. The surplus in Germany's balance of payments is raising the price of our imported goods, and we are exporting so many goods that the German people are left with fewer products at home.

Ms. Deficit: So we agree something needs to be done. But what? Some of our businesses are calling for tariffs, and others want us to devalue our currency, but neither of those actions is an acceptable alternative to our government.

Herr Plus: We also could raise the value of our currency or further stimulate our economy, but either of those actions would surely cost the Chancellor his job.

Fortunately, the waiter arrives to take our order, sparing us the rest of their conversation. While our order is being prepared, let's investigate some of the concepts the two diplomats were discussing.

Just what are the "balance of payments accounts"? Quite simply, they are an accounting of all the payment flows leaving and entering a country, whether from individuals, businesses, or governments. The U.S. Department of Commerce records all our international transactions to help government officials as well as interested private citizens and businesses make informed decisions concerning world trade and finance.

These transactions are divided initially into two categories: those which give rise to an inflow of payments between residents of one country and the rest of the world (called credits), and those which give rise to an outflow of such payments (called debits). Consider the export of an automobile from the U.S. to Canada. The Canadian buyer will supply the market with Canadian dollars in order to acquire the U.S. dollars needed to pay the U.S. supplier. Likewise, a Mexican tourist in the U.S. will supply pesos to the market exchange in order to buy dollars. Both transactions are recorded as credit items in the U.S. balance of payments because they lead to an inflow of payments to the United States.

If U.S. tourists plan to visit Mexico, they must supply U.S. dollars to the market for foreign currencies in exchange for Mexican pesos. A U.S. film buyer who wishes to acquire film rights to a West German movie must supply U.S. dollars to the market in exchange for West German marks. Both transactions are recorded as debit items in the U.S. balance of payments because they lead to an outflow of payments from the United States.

Now look at Handout 7-5-2 and follow the directions. When you are done, return to the rest of this conversation.

Is the balance of payments deficit a bad thing for the United States? Or is West Germany's surplus a bad thing for them? Here we must investigate a bit further. Ah, Ms. Money has arrived to join the trade negotiators at the table next to us. Ms. Money is an international banker. Let's eavesdrop again and hear what she has to say.

Ms. Money: You two are missing half the story! If the United States is importing more than it is exporting, how can it pay for the imports? By definition, what is acquired in imports must either be paid for or owed for. What you have been ignoring is the flow of capital — the so-called "capital accounts."

Ms. Deficit: What has that got to do with this terrible deficit in our current account?

Herr Plus: Or our surplus?

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Ms. Money: Let's consider your country's situation, Herr Plus. Your country is earning far more foreign exchange (U.S. dollars that have been used to buy West German marks) on its exports of goods and services than it is using for its imports. What is happening to all those funds? Or your country, Ms. Deficit. How is it paying for that excess of imports over exports?

Herr Plus: I see what you mean. Many of our banks have invested those dollars back in United States banks and are earning interest on them. Other companies are investing in buildings and other projects overseas as well.

Ms. Deficit: And I believe we are also obtaining funds from your citizens who are buying U.S. Government bonds. This helps to finance our government's budget deficit, and helps keep our taxes down.

Ms. Money: Correct. So now you understand that a current account deficit or surplus is simply a measure of the balance between the goods and services being exchanged, but it does not tell us much about the total amount of currency changing hands. You both were talking about an "imbalance" of trade as if your exchanges were like a teeter-totter with a football player on one end and a ballerina on the other — a game that would end very quickly because of dissatisfaction on both sides.

I think now you understand that every exchange is beneficial to both sides, and that the perceived imbalance in trade is really balanced by other, perhaps less visible, activities. If trade truly were imbalanced, like the teeter-totter, it would stop very quickly.

Thank goodness that misunderstanding is cleared up! Let's look more closely at the *capital account*.

Suppose the U.S. businesses borrow funds from West Germany to finance imports which exceed exports of goods and services. Are the borrowed funds recorded as a credit or debit item? To answer this question, it is easiest to think of the United States as an exporter of an IOU; and, like other exports, IOUs would be recorded as credits. As before, this borrowing of funds would give rise to an inflow of payments to the United States, which was our definition of a credit. Likewise, if a U.S. bank lends money to a West German investor to construct a new building, this action would lead to a debit in the capital account of the U.S. balance of payments because it gives rise to an outflow of payments to West Germany.

These two accounts, the current and capital accounts, almost completely record the flow of currency into and out of the United States. But like any measure, they are not completely accurate. The accounts include a place for a "statistical discrepancy" to measure unrecorded transactions and other imperfections in the data, and another account, the "official reserve account," to measure movements of official intergovernmental settlements that do any "balancing" necessary during a given period.

Now let's attempt to work with the foreign trade accounts again and see if Ms. Money was right. Will the trade accounts balance when we look at both the capital and current accounts? Turn to Handout 7-5-3 and follow the directions.

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Handout 7-5-2
Balance of Payments

Directions

Now it is your turn to record some international transactions. Record each of the transactions below in the respective balance of payments accounts of the United states (U.S.) and West Germany (W.G.). The first transaction has been done for you. (Normally, West Germany would record its accounts in terms of its own currency. For convenience, we record it here in terms of U.S. dollars. This is a legitimate procedure if the West German currency has been expressed in U.S. dollars at the average exchange rate between the two currencies during the period covered.)

	United States		West Germany	
	Debit	**Credit**	**Debit**	**Credit**
U.S. sells $1 million of steel to W.G. builder		$1 m	$1 m	
Bank of America pays $5 million in interest to W.G. depositors	5 m			5 m
U.S. citizens spend $3 million on W.G. Mercedes automobiles				
A U.S. firm receives a $2 million dividend on its investments in W.G.				
W.G. tourists spend $3 million in U.S., while American tourists spend $5 million in W.G.				
A W.G. firm pays $1 million to a U.S. shipping line for transporting a load of cars				
U.S. exchange students spend $8 million for tuition at the University in Bonn, W.G.				
The government of W.G. buys a $10 million missile from the U.S. Army to shore up its defenses				
TOTAL				

The transactions in the examples above are all recorded in (or are a part of what is known as) the "current account" of the balance of payments, and are what most of us think of as exports and imports of goods or services. Notice that the U.S. has exported less than it has imported and is left with a deficit in its current account (i.e., debits exceed credits in respect to West Germany). West Germany is in exactly the opposite situation; it has a surplus in its current account in respect to the United States.

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Handout 7-5-3
U.S. Balance of Payments, 1985

Directions

An abridged version of the U.S. balance of payments accounts for 1985 is reproduced in the information below. Read this information carefully and use it to answer the questions that follow.

U.S. Balance of Payments Accounts, 1985

(All figures are reported in millions of dollars)

Current account:	$ +358,498
Exports	
Imports	−461,191
Net transfers[1]	− 14,983
Balance on current account	$ −117,676
Capital account:	$ − 32,436
Net U.S. assets abroad (capital outflow)	
Net foreign assets in the	+127,106
U.S. (capital inflow)	
Balance on capital account	$ + 94,670
Statistical discrepancy[2]	$ 23,006

(Source: *Statistical Abstract of the United States*, 1987, pp. 776-777.)

Questions

1. Does the U.S. current account have a deficit or a surplus? How do you know?

2. Is the U.S. a net international borrower or a net international lender of money? How do you know?

3. Can the United States continue to run a current account deficit and continue to be a net international borrower? (Hint: think of who gains and who loses in any voluntary exchange between two parties.)

4. Add the totals in the various accounts to confirm that they "balance," since all exchanges must balance or trading would cease.

[1] U.S. Government military and economic aid in the form of grants, U.S. Government and private pensions sent to persons residing abroad, charitable contributions by U.S. organizations and citizens, etc.

[2] The balance of payments on the current account and the capital account should be in balance (i.e., their sum should equal zero); that is why this set of data is called a "balance of payments." If their sum does not equal zero, it follows that any difference from zero is a "statistical discrepancy," i.e., a result of unrecorded transactions, imperfect data, or unavoidable errors in collecting the data.

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Handout 7-6-1
Automobile Embargo

Directions

List as many groups as you can think of that would be affected if the government were to decree that no more automobiles will be imported into the country. The recorder will list your responses on the butcher paper. Predict the changes in prices and employment that such a restriction would create for each group, and provide a brief supply and demand explanation for your prediction.

People Affected	Prices	Impact on Employment	Explanation
1. Firms competitive with auto imports			
ex. a. Domestic auto producers	↓	↓	Demand increases
b.			
c.			
d.			
2. Firms that are complementary with auto imports			
ex. a. Import auto dealers			
b.			
c.			
d.			
3. Secondary markets			
ex. a. Domestic steel producers			
b.			
c.			
d.			
4. Other groups			
ex. a. Auto buyers			
b.			
c.			
d.			

Handout 7-6-2
Domestic Aircraft Embargo

Directions

List as many groups as you can think of that would be affected if the government were to decree that no more domestic aircraft will be exported. The recorder will list your responses on the butcher paper. Predict the changes in prices and employment that such a restriction would create for each group, and provide a brief supply and demand explanation for your prediction.

People Affected	Impact on Prices	Impact on Employment	Explanation
1. Firms competitive with aircraft exports			
ex. a. European aircraft manufacturers	↓	↓	Demand increases
b.			
c.			
d.			
2. Firms that are complementary with aircraft exports			
ex. a. Export bankers			
b.			
c.			
d.			
3. Secondary markets			
ex. a. Aluminum producers			
b.			
c.			
d.			
4. Other groups .			
ex. a. Aircraft workers			
b.			
c.			
d.			

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Handout 7-7-1
Foreign Currencies and Foreign Exchange

Pesetas, liras, pounds, rubles, yen, and kroner. The world of foreign currencies often seems confusing. Not only are many of the names unfamiliar, but we also want to know what each is worth in terms of U.S. dollars.

Because all of these currencies are money, they all serve the same functions. Money is a medium of exchange, a store of value, and a measure of value. As a *medium of exchange*, money can be used to purchase (be exchanged for) goods and services. As a *store of value*, money can be saved to use in the future. As a *measure of value*, money allows us to express the price of things. We can say a car costs so many dollars, while an audio cassette costs many fewer dollars.

Now to a basic question: How do we know what a foreign exchange rate is; that is, how much is any currency worth in terms of other currencies? The simple answer is that a currency is worth whatever people are willing to pay for it. This means it is a case of supply and demand. If there is little quantity demanded for a country's currency or a great quantity available for foreigners to buy, the money will be worth less than if there is a high quantity demanded for it or only a small quantity supplied which foreigners might buy.

For example, when Americans increase their purchases of imports, more U.S. dollars are sent abroad or are exchanged for foreign currencies in order to pay for the imported goods. As the supply of dollars to foreigners thus increases, the dollar tends to be worth less in terms of other currencies. Under such conditions we say the dollar "depreciates." The same general analysis holds true for the currencies of other nations. If a currency increases its worth in terms of other currencies, we say it "appreciates."

Currency values are established and exchanges of currencies occur in foreign exchange markets. These markets exist at banks, at the offices of foreign exchange dealers, and other places where one country's currency or checks can be exchanged for those of another country. But the greatest amount of foreign exchange activity takes place by telephone, telex, or other rapid means of communication used by commercial banks, businesses, and others who deal in large amounts of foreign exchange.

Foreign exchange values can change every day — most days by small amounts; some days by enough to make a difference to the people or businesses that are "converting" (i.e., exchanging) one currency into another. In the longer run, changes of major magnitude can occur. In the early 1980s, the value of foreign currencies, in general, *fell* a great deal against the U.S. dollar. Looking at the situation the other way, the dollar *rose* a great deal against foreign currencies.

For example, in 1979 the worth of the Swiss franc in terms of the dollar averaged 60 U.S. cents, and the worth of the West German mark averaged 55 U.S. cents. In mid-February, 1985, the Swiss franc had fallen to about 36 U.S. cents and the West German mark to about 31 U.S. cents. In about five years or so, from the Swiss and German points of view, the franc had depreciated (declined) by 40 percent in terms of dollars, and marks had depreciated by 44 percent in terms of dollars. From the U.S. point of view, the dollar had appreciated (risen) by 66 percent and 80 percent respectively. Shortly after February, 1985, foreign currencies *in general rose* considerably against the U.S. dollar, at least until the spring of 1988.

From *Master Curriculum Guide in Economics: Teaching Strategies for High School Economics Courses*, 1985. Joint Council on Economic Education, 432 Park Avenue South, New York, NY 10016.

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Handout 7-7-2
Foreign Exchange Worksheet

1. The three functions of money are to serve as:

2. The value of any currency is determined by the _____ of it and the _____ for it.

3. When a currency decreases in value, we say it _____.

   When a currency increases in value, we say it _____.

4. What do we call the places or means of communication by which the value of one country's currency is established in terms of other currencies, and the currencies are traded? _____.

5. Assume the United States produces new products that citizens of other countries buy in large quantities. All other things being equal, what will happen to the value of the American dollar in terms of foreign currencies? _____.

6. Assume the number of U.S. citizens traveling to foreign countries greatly increases. All other things being equal, what will happen to the value of the American dollar in terms of foreign currencies? _____

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Handout 7-8-1
Exchange Rates: Importer

As a buyer of imported goods for a department store chain, you would like to get your purchases from abroad as cheaply as possible. However, you must pay the sellers in the currency of their own country. The values of currencies can change rapidly as import and export demands change, and as governments intervene to try to control the values of their currencies.

Consider three alternative sets of hypothetical exchange rates:

Case 1: \$1 = 200 Japanese yen (Y) = .67 British pounds£ = 2 West German Marks (DM)

Case 2: \$1 = 150 Y = .50£ = 1.5 DM

Case 3: \$1 = 300 Y = 1.00£ = 3.0 DM

By filling in the table below, you will discover the effect of changes in exchange rates on the price you must pay for your imports. To get the correct answer, divide the foreign price by the country's exchange rate. The answer will equal the price in dollars.

Product	Price in foreign currency	Price in dollars: Case 1	Case 2	Case 3
Video cassette recorder	60,000Y			
Wool coat	40£			
Cuckoo clock	200DM			

Compare your table with those of others in your group to make sure you have computed the prices correctly. Then, as a group, determine the answers to the following questions:

1. In which case were your costs as an importer lowest? The highest?

2. In which case would you probably import the most foreign goods?

3. A "strong dollar" is one that can be exchanged for a relatively large amount of foreign currency. As an importer, would you prefer a strong dollar or a weak dollar?

4. In which case would your store most likely offer its products at the lowest prices?

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Handout 7-8-2
Exchange Rates: Exporter

You run a business which acts as an export agent for domestic producers who sell their products overseas. Of course, your clients want to be paid in dollars. That means the ultimate cost to the buyers depends on the amount of their currency they need to obtain the number of dollars they require. The values of currencies can change rapidly as import and export demands change, and as governments intervene to control the values of their currency.

Consider three alternative sets of hypothetical exchange rates:

Case 1: \$1 = 200 Japanese yen (Y) = .67 British pounds£ = 2 West German Marks (DM)

Case 2: \$1 = 150 Y = .50£ = 1.5 DM

Case 3: \$1 = 300 Y = 1.00£ = 3.0 DM

By filling in the table below, you will discover the effect of changes in exchange rates on the prices foreigners must pay for your clients'products. To get the correct answer, multiply the price in dollars times the country's exchange rate. The answer will equal the price in the foreign currency. Remember, there will be three answers in each case.

Product	Price in dollars	Price in foreign currency Case 1	Case 2	Case 3
Bushel of wheat	\$ 3.00			
Ton of coal	\$60.00			
Micro-chip Processor	\$12.00			

Compare your table with those of others in your group to make sure you have computed the prices correctly. Then, as a group, determine the answers to the following questions:

1. In which case were foreigners' costs for U.S. products the lowest? The highest?

2. In which case would your clients probably be able to export the most products?

3. A "strong dollar" is one that can be exchanged for a relatively large amount of foreign currency. As exporters, would your clients prefer a strong or a weak dollar?

4. In which case would your clients probably employ the most people?

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Handout 7-9-1
Disagreement Over World Trade

Most economists agree that specialization and voluntary trade among people of different nations increase world production, lower costs of production, increase employment, keep prices down, and provide a variety of products for consumers to choose among. Yet many people in every country oppose free trade and successfully pass laws to prevent or obstruct trade across national borders. As Mark Twain observed, "Free Traders win all the arguments but Protectionists win the votes." How can this contradiction be explained? Why do so many people disagree with the experts? Why would people be against all the good things promised by a free trade policy? Are people too ignorant or irrational to understand what they are doing? Actually, economic reasoning can help us sort through this problem. First, remember that people tend to make purposeful choices which they hope will make their life better. Second, remember that the benefits and the costs of free trade are not distributed equally among people. These two factors will help you understand differing conclusions about free trade.

Anticipated costs: If a free trade policy for a country's international trade increases an individual's costs, that individual will tend to oppose free trade. But if free trade will reduce costs to an individual that person will tend to favor such trade. For example, low-priced foreign-produced steel may cause a domestic steel maker to lose customers. Such lost sales will reduce the steel maker's revenue. At the same time, a construction company may find that its costs for a building it is constructing will be less because of lower-priced steel. The change in anticipated costs could influence both parties to take opposing sides in a debate over sales of foreign-made steel in this country.

Anticipated benefits: People expecting to sell many products to consumers in other countries would tend to favor free trade for the products made by their companies. The revenues of those companies would increase. In this case these people would be likely to favor free trade. But people associated with a company that has little involvement in foreign trade might favor or be indifferent to restrictions on foreign trade.

Priorities in values: Most people hold similar values but differ on the priority these values should take in respect to any specific issues. For example, people who value national economic independence might ordinarily oppose free trade but might be in favor of such trade if it allowed their country to obtain precious metals it did not possess. Other people may believe in free trade because it is good for consumers and keeps prices low. However, if a community depends upon a specific company for its livelihood, and if free trade would force that company into bankruptcy, the community would probably oppose free trade in that industry. Therefore, if people hold the same values but give them different priority rankings, we will find disagreement.

Priorities change as issues change. Rarely does the issue of free trade *in general* become part of a debate. Instead people debate about trade policy as it concerns specific cases. Should the leather industry be protected? Should farmers get export subsidies? This is the manner in which people sort through free trade issues and their positions on them. They do not attempt to stay consistent in their attitudes on free trade. They do attempt to make choices consistent with their own best interests.

Economizing decisions: Most people make decisions which are in their best interests as they perceive them. These interests may range from selfish greed to altruism, but most people attempt to minimize any foreseeable costs and maximize anticipated benefits. Because the costs and benefits of free trade are not distributed equally, individuals tend to support free trade when they expect more benefits than costs and to oppose free trade when the anticipated costs outweigh the benefits. For this reason people are usually for free trade *except* in those cases where it hurts them more than it benefits them. Accordingly, a U.S. textile mill worker may favor selling U.S. airplanes to Taiwan, buy a Korean-made automobile, and vote for a political representative who promises to prevent cheap foreign textile products made in Hong Kong and Taiwan from being sold in the United States. Individuals make economizing decisions as they consider specific issues. Few people make a decision on world trade as a whole. Instead they are concerned with their jobs, their towns, their friends, and how the sale of imported or exported products — and where they are produced — helps or harms them personally.

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Handout 7-9-2
Conversations About World Trade

Eight important citizens of Ecotopia are discussing foreign trade problems over lunch. Let's listen in and hear what they think about a proposed law to restrict automobile and camera imports.

Theodore Gladhand, Congressional Representative: I want your advice. Some members of Congress want to pass a law prohibiting the sale of foreign-made cars and cameras. They say imported products are bad for the economy and foreign competition has cost this country too many jobs. Before I vote on this bill I wanted to hear your views. Do you think such a law is a good idea?

Johnny Appleseed: Ted, I'm glad you asked my opinion. I think you are looking at the wrong issue. You know my apple and daffodil business depends on exports. Without foreign sales I couldn't earn enough revenue to keep my employees working. If you want to create jobs you should stop worrying about imports and start helping exports. Congress should pass a law to give every exporter a dollar for every item sold to a foreign buyer. That way we could lower our prices to foreigners and therefore increase sales, boost production, and expand employment in this country.

Alice Fisher: Since I don't own a camera and haven't bought a car in 15 years, I'm not very concerned about this new law. We've got a bigger problem around here. I'm trying to make a living fishing for salmon. Four generations of my family have been in the salmon fishing business. Most of my friends also come from families in salmon fishing, and it's a dying business today — a way of life that is becoming extinct. Right now you can buy salmon from Japan and Norway cheaper than I can sell them because they raise their fish in rearing ponds. There is no cost to harvest them. I have to roam the entire coastline looking for fish because our government wouldn't issue environmental permits to allow us to build rearing ponds. Let's ban imported salmon and preserve our way of life.

Fred Flintstone: Look, I sell cameras for a living. I've got to offer the consumer a good price and a quality product to stay in business. If you pass a law banning the sale of foreign-made cameras, you will destroy my business. There is not enough U.S. output of cameras to quickly replace the production by foreign companies. It will take years for the industry to gear up to produce enough quality cameras. Meanwhile, what am I supposed to do — go on welfare? What about John Piston — the Nissan dealer down the street — do you think he can become a General Motors dealer overnight? A lot of people depend on imports for their jobs. These jobs are just as important as other jobs. I think you better vote against this new law.

Rich Hartley: Well, I work on the docks. The Longshore Workers Union really has mixed feelings about this new law. We want to support any bill that gives more jobs to people in the automobile and camera industry, but our jobs depend upon moving products on or off the ships that are loaded and unloaded at the ports on our coasts. If this country refuses to import certain products, what will happen to our loading jobs? We'd go along with the law if you could find some way to guarantee that the shipping business and the ports would still be just as busy and that no longshore jobs would be lost.

Tawnya Raye: In my business we gather computer parts from around the world and assemble them into personal computers that sell for 40% less than the major U.S. brand-name computers. If I couldn't buy inexpensive parts from foreign countries, I wouldn't have a business. Without our foreign suppliers, I'd still be working as a computer programmer at IBM. Now I hear computer companies want to stop my supply of foreign-made computer parts. To me, the bill to restrict automobiles and cameras is just another example of trying to keep low-priced materials out of this country. I think it's a bad idea for the economy and a bad idea for the future of newcomers struggling to make it in the business world.

Dave Jensen: This bill sounds like a good idea. I don't mind free trade, but only if it is fair trade. The governments in other countries subsidize their auto and camera industries so the costs and prices of these products are artificially low. That means I can't compete with them in their country or our country because my government doesn't subsidize me. If Congress passes this law, it will be a signal to other countries they must trade fairly with us or we won't trade.

Janet Milton: As president of the Consumer Action Committee I urge you to vote against this bill. We should thank foreign producers for providing low-cost quality products such as autos and cameras to us. Lower prices allow

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more people to improve their lives with good products they can afford. In addition, imports put competitive pressure on domestic producers to keep their prices down and their quality standards high — a benefit to consumers.

You must remember what happens when consumers save money on high-priced items. I saved $2,000 by buying a Korean car instead of a U.S.-made car. I sent $1,000 to a community relief fund to help homeless people in our city and used the other $1,000 to vacation in Arizona. By paying less for my automobile I could help both the homeless and the people who work in resorts in Arizona. Do we really want to take that option away from people like me just to help a few people in the auto and camera industries? Are others more deserving than consumers, the destitute, and resort workers?

Theodore Gladhand: Well, thanks for your help. Normally I'm in favor of free trade, but there are exceptions to any position. Most important, I want a strong economy not dependent on other countries for manufactured goods. Our manufacturing capability is critical to our national defense. If we ever get into a war we need automobile and camera plants that can be quickly converted to military production. I'm leaning in favor of the bill, but I wouldn't vote for it unless we get help on some of the issues you raised. If we can get some help for the salmon industry, get some financial help for exporters, aid businesses hurt by the new law, and come up with trade agreements to keep our ports busy, then the bill will get my vote. Otherwise, I'll work against it. This is the way we get things done in Congress sometimes. If others help me get my bills passed, or improve their bills as I would like, I'll help them pass their bills or improve my bills as they would like. Just remember, no matter what the situation, I want to do the right thing for the people in this state and community. After all, you are the folks who elected me. Without your support, I'm out of a job.

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Handout 7-9-3
Analyzing World Trade Opinions

People take different positions on specific world trade policies because they:

1. Anticipate different personal costs.
2. Anticipate different personal benefits.
3. Have different priorities among values.
4. Exhibit rational economizing behavior.

Now analyze each speaker's comments in Handout 7-9-2. Use the following format for each speaker.

Name of speaker: _____

Major point: _____

_____

_____

Anticipated costs: _____

_____

_____

Anticipated benefits: _____

_____

_____

Value priorities: _____

_____

_____

Economizing decision: _____

_____

_____

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